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ABSTRACT

The second of three training modules for paraprofessionals working with handicapped children, this manual presents information relevant to paraprofessionals in community colleges, public schools, and child care settings. The module is intended for those with some experience and/or education regarding special needs children. The first of two major competencies addressed is the development of a general knowledge of special education. Objectives considered for this competency include definition of special education, historical developments in special education, assessment and evaluation, the individualized education program (formal provisions, parental participation and student rights), and national and local resources for special educators (with a discussion on the role of the advocate). The second competency, development of general knowledge about seven specific handicapping conditions, considers student characteristics and suggested teaching approaches in relation to: mental retardation; hearing impairment; speech and language impairment; orthopedic and health impairments; emotional handicaps; learning disabilities; and visual impairments. Objectives for both competencies are divided into activities with suggested times noted. (CL)

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ORIENTATION TO HANDICAPPING CONDITIONS

LEVEL II

Training Module

by
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and
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LEARNING AND EDUCATION FOR EXCEPTIONAL PARAPROFESSIONALS (LEEP)

NORTH CAROLINA A&T STATE UNIVERSITY
Greensboro, NC

LEARNING AND EDUCATION FOR EXCEPTIONAL PARAPROFESSIONALS

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Greensboro, North Carolina 27401

A three year project funded by Special Education Programs to train paraprofessionals to work with handicapped children. Training activities stressed the attainment of competency-based skills.

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SUGGESTIONS FOR CONDUCTING TRAINING SESSIONS

Before the Training Session

1. Familiarize yourself with the module. Read the module in order to learn the content of the module. Be familiar with the contents (activities and directions) to prevent stumbling during the training session.

2. Find out the needs of the trainees, their strengths and weaknesses and the amount of time you will have for training.

3. Adapt the module to fit the needs of the trainees and the time designated for training (e.g., four one hour sessions, two four hour sessions). Decide which parts of the module you will use.

4. Schedule a location for the training session. Be sure the room will lend itself to training activities--e.g., blackboard or chart; room can be darkened, enough seating and space for trainees, location of outlets.

5. Decide which audiovisual materials (films, videocassettes) will be needed so that they can be ordered.

6. Reserve audiovisual equipment needed. If possible, check to see that it works. Remember special items such as adaptors, extension cords, take-up reels, extra projector bulbs.

7. Adapt and/or reproduce all handouts needed. If possible, color code them for clarity.

8. Revise the training format to reflect your own training style and presentation plans. Make notes in the margins next to the activities.

9. Become familiar with local resources. Identify agencies, consultants, etc., to inform trainees of local contacts.

10. (Optional) Obtain folders or notebooks for trainees' handout materials. Handouts tend to get scattered if not kept in one place.

11. Review, if necessary, some basic principles of adult learning and training techniques.

12. Develop or adapt an evaluation form to use at the completion of the training session.

During the Training Session

1. Set the stage. If trainees do not know each other, use a few introductory ice breaker activities at the beginning.
2. Use relaxed training approach. Create a "learning can be fun" attitude to help trainees feel free to participate.
3. Provide in-house rules if appropriate—e.g., use of the bathroom, getting coffee if it is provided, etc.
4. Review the handouts, if they have been given as a packet of materials, to ensure trainees have all of them.
5. Have all the materials needed for training on hand—e.g., magic markers, newsprint, chalk, audiovisual equipment, handouts, etc.
6. Elicit participation from trainees as soon as possible.
7. Observe the trainees for signs of involvement or lack of involvement. Be attuned to their needs and build in short breaks or change of pace of the activities.
8. Be aware some trainees may monopolize the discussion or digress from the subject. Trainer should include all trainees in discussing and help them adhere to the topic.
9. Introduce audiovisual presentations with preview questions to provide the trainees with guides for viewing the audiovisuals.
10. Make notes as you proceed to help in planning future training sessions. Note areas of confusion, activities that may need to be revised.
11. Use an evaluation form at the end of the workshop to obtain feedback from the trainees.

After the Training Session

1. Straighten the room—e.g., erase the blackboard, empty ashtrays, turn off lights.
2. Return borrowed audiovisual equipment and materials.
3. Follow-up on requests for additional information from trainees.
4. Incorporate trainees' comments from the evaluations into future training designs.

5. Do a self evaluation of the workshop. What were its strengths and weaknesses?

6. Complete workshop correspondence. Write thank you letters to any consultants used in the workshop.

7. File the training design and a roster of participants so that you will have it available if needed.

INTRODUCTION AND OVERVIEW

ORIENTATION to Handicapping Conditons: Level Two is a training module designed for use with paraprofessionals in community colleges, public schools and child care settings who work with handicapped children. As a result of PL 94-142, handicapped children are being served in the least restrictive environment. Thus, paraprofessionals need help in learning to understand and accept these special needs children.

This module is divided into two major competencies. Competency I focuses on a general introduction to special education. It includes definitions of frequently used terminology, differences in special education and regular education services, and a historical progression of special education, including legislation that has affected special education. Brief descriptions of the Individualized Education Program, screening, and assessment techniques are also included.

Competency II describes each of the major handicapping conditions. The parparofessional is provided with characteristics, causes, and educational strategies as well as resources where he/she can go for assistance.

ORIENTATION to Handicapping Conditions: Level Two is designed for the paraprofessional who has some experience and/or education with special needs children. Including the parparofessional in open, supportive, and thoughtful sessions, the module is based on the philosophy that paraprofessionals must be actively involved in their learning for it to be effective. For less experienced paraprofessionals (those with little little education and experience/training), Orientation to Handicapping Conditions: Level One may be more appropriate.

Each competency consists of objectives which are the focal points of the training. Each objective is divided into activities with suggested times for each activity. The suggested times given after each activity are provided to give the trainer a sense of the overall scheduling of the module. The trainer should vary time lengths based on the needs and interests of the group.

COMPETENCY I:

Develop a General Knowledge of Special Education

OBJECTIVE 1.0:

To Define Special Education and Explain How it Differs From Regular Education Services

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ompetency I: Develop a General Knowledge of Special Education.

Competency I: **Develop a General Knowledge of Special Education.**

Objective 1.0	Content	Activities	Time	Pre/Post Questions
To define special education and explain how it differs from regular education services	**I. Definitions of key terms** **A. Handicapped child** **B. Special education** **1. Special services** **2. Setting variations** **C. Least restrictive environment** **D. Mainstreaming** **E. Related services** **II. Differences in special education and regular education services** **A. The IEP** **B. Local differences**	Trainees complete handout: KEY TERMS USED IN CONNECTION WITH SPECIAL EDUCATION	10"	Under PL 94-142, many handicapped children will be mainstreamed. Mainstreaming is a. A plan whereby all handicapped children will be taught in neighborhood schools rather than in special schools b. The practice of ensuring that handicapped children will be taught vocational skills so that they can support themselves after their education is complete c. The placement of handicapped children in regular classrooms all or part of the day, if this is the most appropriate approach for educating an individual child d. A plan which will eventually incorporate all handicapped children into regular classrooms Currently, provision of special services which must be provided for handicapped students in regular classrooms (i.e., interpreters for deaf children, taped tests, braille materials) is up to the discretion of a school district. (false) true/false An "IEP" is a. Itemized Expectation Plan b. Individual Education Program c. Instructional Education Plan d. Individualized Expectation Program
		Mini lecture: KEY TERMS USED IN CONNECTION WITH SPECIAL EDUCATION	10"	
		Handout: DEFINITIONS OF SOME SPECIAL EDUCATION TERMS	5"	
		Question and answer; group discussion of key terms, emphasis on local applications	15"	
		Brainstorming: differences between special education and regular education	5"	
		Group discussion: (based on brainstorming lists), differences between special education and regular education	15"	
		Handout: TIPS ON MAINSTREAMING	5"	

MINI-LECTURE

Key Terms Used in Connection with Special Education

(Major Resources: Federal Register, Vol. 42, No. 163, PL 94-142: Education for All Handicapped Children Act of 1975.

94-142 and 504: Numbers that Add Up to Educational Rights for Handicapped Children, Children's Defense Fund of the Washington Research Project, Inc., 1520 New Hampshire Avenue N.W., Washington, DC 20036.)

The Education for All Handicapped Children Act of 1975 (PL 94-142) identifies handicapped children as those children, aged 0-21 years, identified as hearing impaired, speech impaired, visually impaired, emotionally disturbed, mentally retarded, physically impaired, learning disabled or suffering from other health impairments. Local or regional names for these handicapping conditions vary, so it may be that in some areas, mentally retarded individuals are referred to as mentally handicapped, emotionally disturbed as emotionally impaired, and so on.

Under PL 94-142, special education is clearly defined as "specially designed instruction, at no cost to parent, to meet the unique needs of a handicapped child, including classroom instruction, instruction in physical education, home instruction, and instruction in hospitals and institutions." The law mandates that each handicapped child is entitled to effective instruction in reading, writing, speaking and arithmetic—all basic skills necessary for self-sufficient living. However, under PL 94-142, special education involves more than classroom teaching designed for children with special learning problems. It also includes:

- Early identification and assessment of disabilities
- Specially trained teachers and teachers' aides
- Speech and language therapy
- Special materials and equipment
- Counseling
- Psychological services
- School health services
- Medical services for diagnostic or evaluation purposes
- Physical education and athletic programs
- Physical therapy
- Special transportation to school and activities within school
- Extra-curricular and after-school activities
- Vocational education
- Employment services
- College placement services
- Parent counseling and special homemaker services that teach natural and foster parents how to care for handicapped children

- Other programs and services deemed necessary for the handicapped child's education

Special education services can take place in a variety of settings. The needs of each student must be taken into account before any educational placement is made. The term used under PL 94-142 to describe the major guide for student placement is the least restrictive envirоronment. The concept of least restrictive environment implies that the child will be educated in the setting which most allows him to function in the real world, with all kinds of children. For some students, this would mean placement in regular education classrooms with nonhandicapped children of the same age range. For other students, a combination of special education and regular education classrooms will be more appropriate. Some severely handicapped children will benefit most from placement in a special education classroom or a residential educational setting. The law states that "1) to the maximum extent appropriate, handicapped children, including children in public or private institutions or other care facilities, are educated with children who are not handicapped and 2) that special classes, separate schooling, or other removal of handicapped children from the regular education environment occurs only when the nature or severity of the handicap is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily."

Mainstreaming is a term which has come to be used to describe placement of handicapped children in the least restrictive environment, usually with nonhandicapped children. In some cases, use of the term "mainstreaming" has come to be associated with the placement of all handicapped children in regular classrooms; however, the principle of mainstreaming is a complex one which provides a variety of options designed to provide a suitable learning environment for each student. As described above, this may or may not mean that handicapped students are placed in regular education classrooms all or part of the day.

PL 94-142 identifies a variety of related services which are to be provided to complete the educational process of handicapped students. Most of these related services have been mentioned, but the law specifically references and defines specific services which should be provided as necessary to meet the educational goals of a particular student. These include: transportation and developmental, corrective and other supportive services required to assist the child in benefiting from special education, such as speech pathology and audiology, psychological services, physical and occupational therapy, recreation, early identification and assessment of disabilities in children, counseling services, and medical services for diagnostic or evaluation purposes, school health services, social work services in schools, and parent counseling and training.

One of the major processes which sets special education apart from regular classroom education is the development of an individualized education program (IEP) for each child. The purpose of an IEP is two-fold: to determine learning goals for each child; and to determine which services the school district is required to provide to help the child meet those goals. Input to the IEP is made by teachers, administrators, other members of the educational team (such as occupational therapists or speech pathologists), parents, and if appropriate, the student.

Other differences between special and regular education services will vary, depending on the state laws governing provision of these services, local school districts, and the settings in which special education is provided. In some jurisdictions regular education students may automatically receive many of the related services mandated for handicapped students; in other school districts, budget or transportation restrictions may limit extra-curricular and after-school services for all students.

HANDOUT

Key Terms Used in Connection with Special Education

Based on your current knowledge of special education and PL 94-142, define the following terms as they apply to the education of handicapped children.

Handicapping Children:

Special Education:

Least Restrictive Environment:

Mainstreaming:

Related Services:

Individualized Education Program:

HANDOUT

Definitions of Some Special Education Terms

Source: Gearheart, Bill R., Special Education for the '80s, The C.V. Mosby Company, St. Louis, 1980.

Continuum of Educational Services The full range of services available for handicapped students. The range extends from full-time residential placement, which is the most restrictive, to full-time placement in regular classrooms, which is least restrictive.

Homebound Service Refers to educational instruction provided in the home.

Hospital Service Educational instruction provided in a hospital.

Individualized Education Program A written plan of instruction that includes a statement of the child's present level of functioning, specific areas needing special services, annual goals, short-term objectives, and method of evaluation. Required for every child receiving special educational services under the conditions of PL 94-142.

Least Restrictive Environment A concept dictating that a handicapped student should be educated within the environment that is most like that in which he or she would be educated if not handicapped. In laws and legal opinions, this refers to the least restrictive environment in which an appropriate or effective educational program can be provided. For example, a child in a wheelchair, with no intellectual disabilities, should be educated with peers in a regular classroom with physical accommodations made for the wheelchair.

Mainstreaming The practice of providing handicapped persons an education with their nonhandicapped peers to the greatest extent possible.

Residential School A facility in which an exceptional individual resides for 24 hours each day. The mentally retarded and mentally ill are most often in need of this type of service.

Resource Room A service delivery model characterized by the provision of assistance to a child by a specialist for some portion of the school day. The room in which this assistance takes place is usually referred to as the resource room.

Special Class Class organized, usually by a particular diagnostic label (such as emotionally disturbed or learning disabled), which has a full-time teacher and in which the students receive most of their instruction. Students are integrated into the regular class for only short periods of time or not at all.

Special Day School Provides day long educational experiences for children. Often private; may be limited to one handicap, or may accept children with various handicaps.

HANDOUT

Tips on Mainstreaming

Resource: Tips on Mainstreaming: Do's and Don'ts in Activity Programs. American Alliance for Health, Physical Education and Recreation, Washington, DC: Vol. 1, No. 10, March 1978.

MAINSTREAMING: A Goal and a Process

"Whatever the mind of man can conceive and believe, it can achieve."
--Napoleon Hill

The word mainstreaming is often misunderstood and inappropriately defined. Mainstreaming is both a goal and a process. Mainstreaming and integration are not synonomous; physical proximity does not guarantee social integration; being together does not in itself bring about acceptance. However, both research and experience show that real understanding, true acceptance, and elimination of prejudices are enhanced by direct people-to-people contact--when people get to know each other as individuals, not as parts of categories. Putting individuals in programs or activities for which they are not ready is cruel; to keep them out of these programs and activities when they are ready and can participate is criminal!

Mainstreaming represents one level in the continuum of services required by the least restrictive alternative mandate contained in the Education for All Handicapped Children Act (PL 94-142) and Section 504 of the Rehabilitation Act (PL 93-112). Rules and regulations for PL 94-142 require that each public agency insure a continuum of alternative placements to meet the needs of handicapped children for special education and related services. Instruction in regular classes, special classes, special schools, home instruction, and instruction in hospitals and institutions are all included as integral parts of this continuum of services. Provisions must also be made for supplementary services such as resource room or itinerant instruction in conjunction with regular class placement. These requirements are consistent with provisions of Section 504 that mandate program accessibility and appropriate accommodations so that handicapped individuals can participate to the maximum degree possible with their nonhandicapped classmates and peers. This process does not:

- suggest massive return to or placement of all children with learning problems in regular grades;

- refer to separate settings as equivalent placements;
- mean the end of all self-contained special classes as service vehicles for children.[1]

This process does suggest:

- a continuum of appropriate service alternatives to allow placement of children as individuals, not members of categories;
- some system other than the present dichotomy of either placement in regular classes or placement in categorically defined special classes;
- preventive services being as important for children with potential learning problems as intervention for children with identified learning problems;
- a need to integrate all levels and types of handicapped children with handicapped peers to the maximum extent possible even if initially integration is only possible in non-academic, play, or lunch areas, or through flexible scheduling to allow regular interactions between handicapped and nonhandicapped children;
- need for greater understanding of handicapped children by all school personnel;
- placement of handicapped children in their home school districts whenever possible to insure mutual home and school peer relationships;
- new roles for education personnel providing services to handicapped students.[2]

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[1] Based on materials developed by Dale E. Coons, Department of Counseling and Special Education, University of Akron, Akron, Ohio, and appearing in IRUC Briefing, Vol. 1, No. 3, May 1976, page 5, published by Physical Education and Recreation for the Handicapped: Information and Research Utilization Center (American Alliance for Health, Physical Education, and Recreation, 1201—16th Street N.W., Washington, DC 20036).

[2] Ibid.

This process emphasizes procedures by which impaired, disabled and handicapped children are placed in educational programs. Some readjustments are necessary in one's thinking and approaches when dealing with handicapped children, whether in a regular classroom, gymnasium, or swimming pool, on the playfield, in a drama class, or in recreational activities. In the past, the procedure was to label a child, place that child--usually categorically based on handicapping conditions--and then program the class. Often these programs had little if anything to do with needs, abilities, and interests of individual children in the class.

> Teachers must really believe that the child rather than the curriculum should be the center of the school.

Now the process is to assess each child's needs, develop a program for each child based on identified needs, and place the child according to individual needs for each activity included in his/her individualized education program. In fact, many of our ideologies and procedures regarding homogeneous and heterogeneous grouping must be carefully reviewed. Have these procedures been designed to help meet interests and needs of individual children or for the administrative and organizational conveniences of program personnel?

> Handicapped children have the right to grow up in a world which does not set them apart, which looks at them not with scorn or pity or ridicule, but which welcomes them exactly as it welcomes every child, which offers them identical privileges and identical responsibilities.

FIRST STEPS IN MAINSTREAMING

> The best reformers the world has seen
> were those who began with themselves.

Regardless of an individual child's specific condition, various strategies exist for introducing and improving relationships between handicapped and nonhandicapped children. For example:

- Arrange with parents for special needs and non-special needs children to play together outside of school.
- Individualize the curriculum for all children, not just special needs children.
- Establish respect for individuals as the prime classroom value.
- Create a safe, protected environment so that children can risk forming relationships.

- Explain individual differences to children in a neutral, value-free manner.
- Read aloud books and stories that deal with differences.
- Answer children's questions directly and honestly.
- Reinterpret actions for children in behaviorally observable terms--e.g., "His legs don't work very well," or "It's hard for him to hold your hand without squeezing it."
- Encourage children to use behavioral explanations rather than labels.
- Design and guide positive interactions between children based on a common interest or curricular experience.
- Encourage all children to talk about feelings such as fear and anger—and help them begin to understand and govern these emotions.
- Encourage spontaneous dramatic play and role playing to help nonhandicapped children identify with the experience of special needs children—e.g., using crutches, walkers, hearing aids, crawling or limping.
- Create opportunities for all parents to meet with each other to discuss their reactions to mainstreaming.[3]

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[4] Based on First Steps in Mainstreaming: Some Questions and Answers, by Samuel J. Meisels, Media Resource Center, Massachusetts Department of Mental Health, March 1977.

COMPETENCY I:

Develop a General Knowledge of Special Education

OBJECTIVE 2.0:

Briefly Outline the Historical Progression of Educational Services For Handicapped Individuals, Including Current Legislation Bases For the Provision of Special Education Services

ompetency I: Develop a General Knowledge of Special Education.

Objective 2.0	Content	Activities	Time	Pre/Post Questions
riefly outline the istorical progression f educational services or handicapped individals, including current egislative bases for he provision of special ducation services	I. Historical Developments A. Influence of superstition B. General trends before the mid-1700's C. Beginnings of residential schools for the blind and deaf D. The 19th century age of institutions E. Beginnings of special education in the public schools F. Trends, 1920-1960	Mini lecture: THE HISTORICAL DEVELOPMENT OF SPECIAL EDUCATION	10"	As regards special education, the 19th century was the age of a. tyranny b. institutions c. special education classes in the public schools d. repression
		Group discussion: The effect of attitudes toward handicapped individuals on services and special education	15"	
	II. Legislation Affecting Special Education A. Section 504 B. PL 94-142 C. The Creech Bill	Group discussion: Education of handicapped children when trainees were in school (awareness) — were any students mainstreamed? — were there "special ed" classes? — did trainees play with any handicapped kids in their neighborhoods?	15"	Section 504 of the Vocational Rehabilitation Act of 1973 mandates program accessibility for federally funded activities (true) true/false PL 94-142 provides for a "free appropriate education" only for handicapped children who can be served in the public schools (false) true/false
		Guest speaker: Local mandates regarding special education	10"	In North Carolina, the law mandating state implementation of federal legislation is a. The Creech Bill b. The NC Education for All Handicapped Act c. The Harper Amendment d. The Special Education Amendment to the Education Act of 1977
		Question and answer; group discussion on local implications of Section 504, PL 94-142 and local mandates on special education	15"	

MINI-LECTURE

The Historical Development of Special Education

(Major Resource: Gearheart, Bill. Special Education for the '80s, The C.V. Mosby Company, St. Louis, 1980.)

The treatment accorded persons with disabilities has varied widely throughout history. Although a variety of handicapping conditions have been recognized for centuries, specific educational services for individuals with these disabilities is a relatively recent phenomenon. One reason for this has been the way society has reacted to these handicaps--reactions have varied from fear, to suspicion, or to reverence as disabled persons were viewed as possessed by demons, being punished for some heineous sin, or as endowed with special gifts or insights.

Prior to the mid-1700s, services to handicapped individuals fluctuated between more scientific approaches and humanitarian desires to be of service to less fortunate persons and the superstitious fear of the unknown causes and implications of disabilities. At times, incarceration, torture, and even death were not uncommon fates of the disabled. Then, in the middle of the eighteenth century, schools for the deaf and blind of all social classes were opened in France and Germany. England followed in offering educational programs for deaf and blind students later in the 18th century, and in the early 1800s began similar programs for the mentally retarded. As these programs began to prove that handicapped individuals could benefit from educational services, they began to spread to the United States. As a result, the 19th century has been recognized as the first to offer a century-long, organized effort to train or educate the handicapped.

The 19th century saw the rise of a number of "asylums" or "institutions" for the deaf and residential schools for the blind and mentally retarded. At the same time, Dorothea Dix, advocating for the rights of mentally ill persons, was responsible for the establishment of thirty-two modern mental institutions. During this time, although rapid improvements were made in the types of educational opportunities available to disabled individuals, these services were primarily provided in segregated settings. Residential facilities, for the most part, served both children and adults and were supervised by medical personnel.

Through the efforts of Dr. Alexander Graham Bell and other pioneers in special education, the Department of Special Education, designed to facilitate education of handicapped students in the public schools, was made a part of the National Education Association (NEA) in 1902. This began the development of the self-contained special education classroom—although the quality and focus of special education practices varied widely from jurisdiction to jurisdiction, depending on state laws.

Between 1920 and 1960, self-contained classes for the educable mentally retarded and physically handicapped grew in popularity, while the trainable mentally retarded (those with IQs under 50) were often denied educational opportunities. At the same time, residential schools for the mentally retarded individuals not being served in the public schools became more numerous, as did residential facilities for deaf and blind students. For the most part, the latter were more educationally oriented than residential facilities for the retarded. In some cases, special modified classrooms designed for use by physically handicapped students began to be replaced by special schools. Thus, through the first half of the twentieth century, while services for handicapped students within the public school system expanded, in many cases expansion of these services lead to a growth in segregated and residential schools and educational programs.

Beginning in the mid-1960's, societal pressure by parent groups and other advocates for the rights of handicapped individuals led to a variety of legislative acts related to special education and services for disabled individuals. These, in turn, provided the framework for two of the most important legislative actions related to the rights of disabled individuals--Section 504 and PL 94-142.

In the last few years alternative ways to meet the education and social needs of the handicapped have become an important issue before the U.S. Congress. Congressional action resulted in the passage of two laws: one that addresses bringing handicapped individuals into the mainstream of society, and another which provides money and guidelines for the education of disabled individuals.

Section 504 of the Rehabilitation Act (PL 93-112) was signed in 1973. It is the first civil rights law protecting handicapped people of all ages. Intended to bring handicapped people into the mainstream of American life, Section 504 prohibits discrimination on the basis of a physical or mental handicap in every federally-aided program or activity in the country. It requires that programs be as accessible for the handicapped as they are for the nonhandicapped. Because the final development and implementation of the regulations did not take place until 1977, they were similar to and complement those of PL 94-142. School districts that choose not to implement special education as defined in PL 94-142 risk losing all federal funds under Section 504.

The Education for All Handicapped Children Act (PL 94-142) was signed in 1975. It is a comprehensive legislation relating to public school education and guarantees handicapped children a "free appropriate public education" in the "least restrictive environment." Basically, the law means that a variety of free educational programs and services will be available to meet the unique needs of handicapped children and that these children will be educated as much as possible with nonhandicapped children. PL 94-142 is a public school mandate that applies to children between the ages of 3 and 21 who require special services. The law mandates specific placement options which allow the education of handicapped students in the most appropriate setting--whether in regular or self-contained classrooms--and the availability of a variety of "related services" as necessary to help the child benefit from special education. PL 94-142 also calls for the development of an individualized education plan (IEP) for each handicapped child which outlines specific educational goals and the means of meeting those goals during a specific period of time.

Each state must enact its own legislation related to federal mandates. In North Carolina, the Creech Bill (House Bill 824) which was signed in 1977, is the law that attempts to make state regulations consistent with federal legislation. The Creech Bill provides for a free, appropriate publicly supproted education to every child with special needs (including gifted and talented students) between the ages of five and eighteen.

Copies of PL 94-142 regulations (42 Federal Register 42474, et. seq.) can be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 (45 cents per copy). The Section 504 regulations (42 Federal Register 22676 et. seq.) can be obtained from the U.S. Department of HEW, Office for Civil Rights, 330 Independence Avenue S.W., Room 5400, Washington, DC 20201.

COMPETENCY I:

Develop a General Knowledge of Special Education

OBJECTIVE 3.0:

To Describe Various Methods of Identifying and Evaluating A Handicapped Child's Current Educational and Skill Level

ompetency I: Develop a General Knowledge of Special Education.

Objective 3.0	Content	Activities	Time	Pre/Post Questions
o describe various ethods of identifying nd evaluating a handiapped child's current ducational and skill evel	I. Screening A. Yearly screening 1. Medical . 2. Auditory 3. Visual 4. Speech B. Continuous screening	Mini lecture: WAYS TO IDENTIFY CHILDREN WITH SPECIAL NEEDS	5"	Under PL 94-142, handicapped children must be given IQ tests yearly true/false (false)
	II. Evaluation under PL 94-142 A. Procedures for evaluation and testing B. Timelines (section not done)	Panel presentation: IDENTIFICATION OF PROBLEM AREAS IN SPECIAL EDUCATION SETTINGS (Panel could include a motor development specialist, speech pathologist, physician, etc.)	15"	Continuous screening refers to: a. The practice of compiling baseline data on a particular disability area throughout a child's academic career b. Using observation checklists and other methods to look at all areas of a child's development c. Medical procedures under which the child is closely observed for two 24-hour periods with 48 hours between observations d. Monitoring of the child's academic progress throughout the year.
		Question and answer; group discussion of panel presentation	15"	
		Viewing of videotape of two or three handicapped children. Group discussion of areas for further diagnosis	15"	
		Same activity with two or three young children	30"	
		Mini lecture: REGULATIONS ON EVALUATION UNDER PL 94-142	5"	
		Group discussion: Implications for the Classroom	10"	

MINI-LECTURE

Ways to Identify Children With Special Needs

There are various methods of identifying and evaluating a child's current developmental skills so that appropriate activities can be utilized for him. The interdisciplinary approach, involving persons from the field of education, psychology, and health care provides the most complete assessment about a child's special needs.

Let's take a brief look at the steps involved in identifying handicapped children.

The first step is screening. Screening means observing children to see if there are any who have problems and who need to be referred for professional assessment. It is one of the most important responsibilities of those who work with children. Screening is not intended to diagnose problems; the purpose is to sort out or identify the children who are having trouble in some area of development. These children are then referred to professionals who are trained to diagnose problems and identify handicaps.

Screening is important because it is often the first step to a child's receiving help. The earlier the help, or intervention, the better the chance the child will have to improve, and the less the problem will interfere with the child's learning. This is why, as children enter day care at an earlier age, more emphasis should be placed on screening.

There are two types of screening. The first type yearly screening is for specific problems such as medical, hearing, visual, and speech problems and should be included as part of the Screening Program. Yearly screening is usually done by a professional. There are four types of yearly screening:

1. Medical screening should be conducted by a physician before a child enters any type of center or home-based program. A medical form completed by the child's physician is required for enrollment in licensed child care programs and in public schools.
2. Auditory screening should be provided for all young children and older children whenever a problem is suspected. This screening is usually done by an audiologist, nurse, speech pathologist, or a health aide trained to use an audiometer.
3. Visual screening should also be provided for all children and is usually done by a nurse, health aide, or someone trained to do visual screening.

4. Speech screening should be provided for all children by a speech pathologist or therapist.

Yearly medical, visual, hearing and speech screening is an important way of identifying possible problems. However, there are some drawbacks to relying only on a "once a year" approach to identifying problems which may affect a child's ability to learn. This type of screening is usually done by someone who is a stranger to the child and sees the child only briefly. Children, particularly young children uncomfortable with strangers, may not act in a typical manner. Sometimes children simply do not respond, and the results of screening are not valid. Additionally, while problems which exist at that time of screening may be identified, other problems may develop later. For these reasons, it is important for persons involved in the handicapped child's education to understand the importance of their observations and to conduct their own screening as well. You do make a difference.

A second type of screening is continuous screening. Continuous screening means looking at all areas of the child's development, such as general health, behavior or social, and self-help, and is for the purpose of referring a child who may need further in-depth assessment. This type of screening can be done by the teacher and/or aide and should be an ongoing part of the program. Various types of screening methods are: observation, checklists, and commercial screening instruments. Some require no special training to administer, while others are more complex and require considerable knowledge and skill before being given.

COMPETENCY I:

Develop a General Knowledge of Special Education

OBJECTIVE 4.0:

To Explain the Individualized Education Program And Its Implications for Education of Handicapped Children

Competency I: Develop a General Knowledge of Special Education.

Objective 4.0	Content	Activities	Time	Pre/Post Questions
To explain the Individualized Education Program and its implications for education of handicapped children	I. The IEP under PL 94-142 A. Definition B. Purposes C. Contents	Mini lecture: WHAT ARE IEPs (supplement with overhead projector/transparencies of sample IEP form, if possible)	10"	Which of the following are not mandated as part of the IEP? a. Short-term instructional objectives b. Follow-up activities for parents and others to do in the home c. The length of time the IEP covers d. The extent to which the student will be able to participate in regular programs
	II. Developing the IEP A. The team approach B. Rights of parents and students	Handout: INDIVIDUALIZED EDUCATION PROGRAMS	5"	
		Handout: SAMPLE IEP FORM USED IN LOCAL SCHOOLS	5"	
		Small group work (at least two groups)		Parents have the right to attend IEP conferences and to make recommendations concerning educational goals of their child. (True) true/false
		1. Each group develops an description of a handicapped child including age, sex, family life, handicapping condition(s), skill level, interests, etc.--be as detailed as possible	5"	
		2. Groups exchange "case studies," develop sample IEP's using handout form. Must have at least two long-term goals	15"	
		3. Presentations by small groups and group discussion of IEP's	15"	

MINI-LECTURE

What Are IEP's

PL 94-142 requires the development of a written individualized education program (IEP) for each and every handicapped child to be served. The contents of the IEP will be based on the strengths and weaknesses identified in the child's assessment, recommendations made by the teacher, administrator, specialists, parents, and other concerned persons who are or have been involved with the child, and the type of special support services the child may need to benefit from learning experiences.

An IEP is necessary to assure that identified handicapped children receive the types of services and activities which will best help them. Therefore, an IEP helps to guarantee that handicapped children will receive the kind of individual program they need to participate in activities at their own level and to make progress at their own rate.

Working with handicapped children is somewhat like taking a long trip. You need to know the starting point: where the child is now. You need to know what is the destination or goal: what is to be accomplished with the child over a period of time. Finally, you need to have a plan describing how, when, and where the goals are reached with handicapped children is essential if their special needs are to be met. The IEP is the guide or "road map" in working with the child.

The IEP is the component of PL 94-142 that most affects the classroom teacher. The primary functions of the IEP include the following:

- Basis for discussion in program planning
- Fosters educational accountability
- Is an organizer for the development of the curriculum
- Supports movement toward normalization
- Enables long-term growth
- Allows the involvement of all concerned

As mandated by PL 94-142, each IEP must contain specific components regarding the child's educational needs and the suggested procedures for meeting them. Components which must be present include:

- Present levels of educational performance
- Annual goals or objectives
- Short-term instructional objectives
- The extent the student will be able to participate in the regular programs
- Specific educational services to be provided
- Projected date for initiation of services

- Anticipated duration of services
- Evaluation procedures including criteria and schedule for determining whether instructional objectives are being achieved on at least an annual basis

The law also describes the people who should be involved in developing the IEP. These include a representative of the school agency other than the child's teacher (such as the principal); the child's teacher; one or both of the child's parents; the child (where appropriate); other individuals at the discretion of the parent or agency. Stringent measures must be taken to notify the parents of the IEP and their role in developing their child's educational plan. The services of the IEP are legally binding once parental consent has been given to begin implementation of the plan.

In most school districts, a team approach is utilized in developing the IEP. Specialists involved in each phase of the child's education provide long-term goals and short-term objectives for the subject areas (art, PE) or service areas (occupational therapy, music therapy) in which they work with the child. An overall plan is developed with each team member adding to the discussion.

HANDOUT

Individualized Education Programs

From: Practical Pointers, Individualized Education Programs, Washington, DC: American Alliance for Health, Physical Education and Recreation, Vol. 1, No. 6, October 1977.

> Teachers must really believe that the
> child rather than the curriculum should
> be the center of the school

Among several key provisions in the Education for All Handicapped Children Act (PL 94-142) is the stipulation that as part of a free appropriate education guaranteed every handicapped child, an individualized education program must be developed and implemented for every child receiving special education and related services. Since instruction in physical education is a defined part of special education under PL 94-142, it is logical that physical education must be a part of the individualized education program for every handicapped child receiving special education and related services. Therefore, it is vital that all physical educators be conversant with provisions of both the law and its rules and regulations as related to individualized education programs; they must also be knowledgeable of ways to develop and implement individualized educational programs. Among many questions being asked about individualized education programs are:

- What are they?
- For whom must they be developed?
- When do they become effective?
- Who is responsible for developing and implementing them?
- What must they contain?
- How are they evaluated?

What Are Individualized Education Programs?

An individualized education program (IEP) is a written statement that is the key provision for assuring a free appropriate public education for every handicapped child. This provision applies to every handicapped child receiving special education and related services supported by public education funds. Handicapped children placed in or referred to private schools or facilities by a public agency or enrolled by that agency in parochial or other private schools are considered to be benefiting from special education and related services from a public agency and, therefore, are covered by these provisions. These provisions also apply to all public agencies including departments of mental health, mental retardation, developmental disabilities, and welfare. Receiving special education does not simply apply to children in special classes but includes those receiving services of a resource teacher several hours a week or obtaining any other form of specially designed instruction.

On October 1, 1977 and at the beginning of each school year thereafter each public agency shall have in effect an individualized education program for every handicapped child receiving special education from that agency. Each child's individualized education program must be reviewed and revised as needed at least once a year. Even though an individualized education program must be in effect at the beginning of every school year after the 1977-78 school year, review and revisions can be made at any time during a school year. In this way personnel responsible for a large number of children receiving special education services can schedule review meetings throughout the year and do not have to deal with them all in a short period of time.

Individualized Planning Conferences

Every child receiving special education services prior to October 1, 1977 should now have an individualized education program based on a planning conference held prior to that data. Any child identified after October 1, 1977, and felt in need of special education services, must be processed according to provisions of the law if these services including an individualized education program are to be provided under PL 94-142. The following steps must be followed in this process:

- Identify child on the basis of a defined handicapping condition and according to priorities specified in the law—i.e., children not receiving any educational services or those not benefiting from full services.
- Refer the child according to state procedures for assessment and evaluation.
- Assess the child to determine levels of function in educational, psychological, medical, sociological, and adaptive behavior areas.
- Determine eligibility of the child for special education services by eligibility committee. Once a child's eligibility has been determined, an individualized planning conference must be convened within thirty days.
- Convene the individualized planning conference and initiate the process for developing and implementing an individualized education program for the child.

Parents of the child must be informed of and give approval before the assessment process starts. In addition, parents must be a part of the individualized planning conference and approve the individualized education program as well as types of placements for their child--i.e., regular, resource, or special classes or combinations thereof. By statute, the following individuals must take place in individualized planning conferences:

- A representative of the public agency other than the child's teacher who is qualified to provide or supervise the provision of special education (school principals are so qualified).

- The child's teacher. This could be the child's special education teacher, a regular teacher or one qualified to provide education in the type of program in which the child may be placed. Whether a child is or is not currently in special education will affect decisions about teachers taking part in this conference. Nothing prohibits more than one teacher from taking part in these planning conferences. Logic dictates that the physical education teacher should be the one participating in the individualized planning conference when children need only specially designed physical education.

- One or both of the child's parents.

- The child where appropriate.

- Other individuals at the discretion of the parent or agency.

When a handicapped child is assessed for the first time, the public agency shall insure that a member of the evaluation team or a representative of the public agency, the child's teacher, or some other person knowledgeable about the assessment procedure used with the child and familiar with results of the evaluation participates in the planning conference. In this way individuals responsible for developing the individualized education program will have necessary information about the child so that programs are truly individualized.

Each public agency shall take steps to insure that one or both of the parents of the handicapped child are present at individualized planning conferences or are afforded the opportunity to participate. Agency responsibilities include:

- Notifying parents of the conference early enough to insure that they will have an opportunity to attend.
- Scheduling the conference at a mutually agreed on time and place.

If neither parent can attend, the public agency shall use other methods to insure parent participation including individual or conference telephone calls. A conference may be conducted without a parent in attendance if the public agency is unable to convince the parents that they should attend. In such instances the public agency must have a record of its attempts to arrange a mutually agreed on time and place including:

- Detailed records of telephone calls made or attempted and results of these calls.
- Copies of correspondence sent to the parents and any responses received.
- Detailed records of visits made to the parents' home or place of employment and results of these visits.

It is also required to give a copy of the individualized education program to parents upon request. This should help to insure that parents are fully informed of the program for their child and assist them in participating in future conferences on the individualized education program.

The individualized education program for each handicapped child must include:

- Statement of the child's present levels of educational performance. Although not now specified in the rules and regulations, performances in academic, social, motor/psychomotor, prevocational/vocational, self help and adaptive behavior areas should be considered for each child's individualized education program.
- Statement of annual goals including short-term instructional objectives.
- Statement of specific special education and related services to be provided to the child and the extent to which the child will be able to participate in regular educational programs.
- Projected dates for initiation of services and the anticipated duration of the services.
- Appropriate objective criteria and evaluation procedures and schedules for determining on at least an annual basis whether short-term instructional objectives are being achieved.

It should be noted that these provisions do not require that any agency, teacher, or other person be held accountable if a child does not achieve growth projected in the annual goals and objectives.

The very nature of the individualized education program requires some readjustment in one's thinking and approaches in dealing with handicapped children whether in the regular classroom, gymnasium, swimming pool, or on the playfield.

- In the past the procedure has been to label a child, place that child, and then program for the class. Often these programs had little if anything to do with needs of individual children in a class!

- Now the process is to assess each child's needs, develop the program for each child based on identified needs, and place the child according to his/her needs for each activity included in the individualized education program.

Put another way, an evaluation must be conducted which indicates that the child needs special education services. This evaluation is then followed by an individualized planning conference from which the individualized education program is developed; information about implementation is to be included. Complete reevaluation is only required at least every three years. However, the individualized planning committee must meet at least annually to review and revise each child's individualized education program.

Physical Education in Individualized Education Program

Since different individuals are providing different interpretations of the same rules and regulations, actual individualized education programs can be found with greatly differing amounts of detail relative to physical education. Some of these programs contain only the most basic of information; others go into considerable specifics. This is to be expected because of the individuals responsible for developing individualized education programs. For example, some individualized education programs:

- Do not deal with physical education at all. It seems that such an approach is inconsistent and in conflict with the intent of the law and the letter of the rules and regulations. Since physical education is a defined part of special education, individualized education programs for children needing specially designed physical education programs must include such programs to be in compliance. However, children for whom no specially designed physical education program is needed do not require identification of physical education in their individualized education programs. Whether included in the individualized education program or not, individualized planning committees are expected to review motor, physical, movement, and fitness needs of each child to determine whether or not specially designed physical education programs are required.

- State that the student is to be scheduled in regular physical education activities throughout the year or for certain units or activities. The generally accepted interpretation has been that for these aspects of physical education, no specially designed program or approach is necessary and therefore does not need to be dealt with in these individualized education programs. For these students, following the regular physical education program is appropriate so that physical education or particular units or activities need not be detailed on the individualized education programs.

- Contain information about specially designed physical education program and activities. As such, the student's present level of physical education performance should include (1) levels of physical and motor fitness, (2) performance in fundamental motor skills and patterns, and (3) skills in aquatics, dance, individual and group games and lifetime sports.

It should be noted that use of physical education activities to attain general or specific social, intellectual, emotional, cognitive, or affective goals per se is not be considered physical education under either the statute or the rules and regulations. As such, physical education is considered to be a legitimate need with its own goals and objectives and not simply a method or means to an end. Terms in the law and the rules and regulations such as ". . . instruction in physical education . . ." and ". . . development of physical and motor fitness . . ." and contents of Congressional testimony make it extremely clear that physical education is to be included so that children can realize benefits of attaining specific and definite physical, motor, psychomotor, and health goals and objectives. Certainly, we want to encourage extensive use of physical education, recreation and sport activities as methods and means for attaining specific cognitive and affective goals and objectives, such as improved self-confidence and self esteem. However, this process should be in addition to and not in place of planning and implementing physical educational and recreational activities for their own specific, unique, and necessary goals and objectives. These same principles and cautions must be exercised in differentiating therapies and physical education. Obviously free play and recess do not meet the intent of individualized education programs for physical education. These philosophies and factors should be reflected in individualized education programs.

Physical Educators and Individualized Education Programs

Even though instruction in physical education is a defined part of special education that must be made available to every handicapped child receiving special education, some individuals and agencies are not considering physical education for individualized education programs. There seems little doubt that the law itself and the intent of Congress are such that when specially designed physical education is needed, it is to be a part of the individualized education program. However, regardless of interpretation in a given state or local education agency, it is vital that physical educators make sure physical education is included in each child's individualized education program when necessary and appropriate.

Physical educators must take the initiative in this process to:

- Insure that physical education is included in each child's individualized education program when necessary and appropriate.

- Volunteer input about physical and motor development along with information about social, emotional, and personal characteristics of a child so that this information is available to the team as it makes the individualized education program for that child.

- Be available to take part in individualized planning conferences and let it be known of personal interest in actively taking part in this process.

- Make sure that children who need specially designed physical education programs receive these services and are not placed in regular programs inappropriately.

- Guard against children being programmed for specially designed physical education when their needs can be adequately and appropriately met in regular programs.

- Remind members of the committee that every handicapped child does not need, want, or require specially designed physical education.

- Remind members of the committee that certain kinds and types of specially designed physical education programs can be carried out in regular physical education classes, some with additional support and resources and others without any supplementary assistance.

- Keep foremost in mind the specific nature of learning in general and physical education in particular as individualized education programs are planned and implemented.

- See that placement flexibility is maintained in individualized education programs so that a given child participates in regular physical education activities where possible and in specially designed programs as necessary.

- Remember that individualized education and one-to-one learner-teacher relationships are not synonomous.

Specially Designed Physical Education Services

Specially designed physical education services can be provided in special, adapted, or regular physical education classes. For example:

- Combined classes provide opportunities for students needing special assistance to be assigned right along with classmates needing no special provisions. Each student is assigned activities within the combined class on the basis of physical condition, individualized abilities, and personal limitations. Provisions of the individualized education program can be fulfilled in combined classes.

- Dual classes provide students opportunities to take part in special physical education classes on certain days to carry out a specially designed program and to be in a regular class to participate with peers on other days.

- Flexible plan provides students opportunities to be assigned special or different activities when they are not able to take part in regular activities or when specially designed physical education activities are prescribed.

Regardless of the organizational pattern or administrative structure, any handicapped child requiring specially designed physical education must have an individualized education program to assist in attaining specific goals and objectives for the time this type of program is in effect. Objective criteria and evaluation procedures must be scheduled for determining at least on an annual basis whether short-term instructional objectives have been achieved.

COMPETENCY I:

Develop a General Knowledge of Special Education

OBJECTIVE 5.0:

To Investigate National and Local Resources Helpful In the Provision Of Educational Services for Handicapped Individuals and to Define the Role of Advocate

Competency I: Develop a General Knowledge of Special Education.

Objective 5.0	Content	Activities	Time	Pre/Post Questions
To investigate national and local resources helpful in the provision of educational services for handicapped individuals and to define the role of advocate	I. Using national and local resources A. With preschool children B. With elementary and intermediate students C. With high school students D. By teachers/aides	Mini lecture: NATIONAL AND LOCAL RESORUCES FOR SPECIAL EDUCATORS	5"	An advocate for a handicapped child is:- a. That child's legal guardian b. The person required to attend the IEP conference on behalf of the child c. A person outside the child's immediate family who assumes the responsibility of caring for the child d. A person who actively seeks to protect the rights of the child
		Group discussion: How to use resources	15"	
		Handout: NATIONAL SERVICE AGENCIES	5"	
	II. The role of the advocate A. Definition B. Levels of involvement	Panel Presentation: LOCAL RESOURCES FOR SPECIAL EDUCATORS (Panel should include representatives of 4-5 local support and resource groups such as the ACLD, ARC, Recreation Department, nearby colleges and universities)	15"	
		Question and Answer; Group Discussion of Panel Presentation	20"	
		Resource Exhibit: Trainees should be given time to view displays of resource materials set up by panelists, workshop staff	10"	
		Brainstorming: The role of the advocate	5"	
		Group discussion of brainstorming lists	15"	

MINI-LECTURE

National and Local Resources for Special Educators

Special education does not take place in a vacuum. Any educational service must involve parents, children, and a variety of professionals, working together for the benefit of the student. It is therefore important that special educators become familiar with the national and local resources—agencies, persons and information sources—which provide services, aid and information and referrals which may benefit the handicapped child.

Special educators (teachers and aides) working with infants, preschool children, and students recently disabled will want to be able to refer parents to national and local agencies, as well as to parent groups concerned with particular disabilities. Examples of these types of resources include United Cerebral Palsy, Inc., the local chapter of the Association for Retarded Citizens, and the Association for Children with Learning Disabilities, which organizes parent support groups. Educators may also need to be familiar with the social and health services available in a particular area, and the financial and other support services which can be obtained there.

Teachers and handicapped students in elementary and intermediate grades may want to add to their resource lists various agencies which provide recreational and leisure time services to disabled children—such as Boy Scout and Girl Scout troops in the area which offers integrated or segregated opportunities, and programs offered by local recreation departments which may be of interest to a given student—or identify family-oriented activities accessible to disabled individuals. Resources might also include programs or materials which parents can use at home with their children.

High school students and their parents may need information on career planning, employment opportunities, and college counseling. Support groups for parents and disabled teens may be especially important to the older student as he wrestles with adolescence as well as disabilities.

Familiarity with national and local resources benefits the special educator, too: agencies sometimes provide educational materials and opportunities; information on the implications of specific handicapping conditions can be obtained from qualified professionals; and educators can become involved with students and their families in different settings and on different types of programs.

Teachers and aides may also want to become involved in helping disabled individuals to attain the civil and human rights to which they are entitled.

In this role, the teacher becomes an advocate for the rights of handicapped persons. Advocacy efforts can take place on a variety of levels, depending on the interest of the person involved. These could include, but are not limited to:

- Participation in local agency parent and support groups
- Support of local agency efforts to assure specific rights of handicapped individuals
- Help in raising funds for local resource agencies
- Lobbying efforts before the local school board to assure appropriate services for handicapped students
- Writing letters to senators and representatives in support or rejection of specific legislative action related to disabled individuals
- Help to influence local businesses, programs and facilities to become more accessible to handicapped persons
- Include information on the rights and responsibilities of disabled individuals in classroom instruction
- Acting as a spokesperson for a particular disabled person

The list is endless, and depends entirely on the interest and motivation of the advocate.

HANDOUT

National Service Agencies

This is an informational list only. Inclusion or exclusion of an agency on this list does not necessarily imply special recommendation or condemnation by this office.

Alexander Graham Bell Association
for the Deaf
3416 Volta Place N.W.
Washington, DC 20007

Allergy Foundation of America
801 Second Avenue
New York, NY 10017

The American Association for the
Education of the Severely-
Profoundly Handicapped
P.O. Box 15287
Seattle, WA 98115

American Association for Gifted
Children, Inc.
15 Gramercy Park
New York, NY 10003

American Cancer Society
219 East 42nd Street
New York, NY 10017

American Foundation for the Blind
15 West 16th Street
New York, NY 10011

American Printing House
for the Blind
1839 Frankford Avenue
Louisville, KY 40206

The American Speech and
Hearing Association
9030 Old Georgetown Road
Washington, DC 20014

Arthritis Foundation
1212 Avenue of the Americas
New York, NY 10036

Association for Childhood
Education International
3615 Wisconsin Avenue N.W.
Washington, DC 20016

Children in Hospitals
31 Wilshire Park
Needham, MA 02192

Closer Look
Box 1492
Washington, DC 20013

The Council for Exceptional
Children
1920 Association Drive
Reston, VA 22091

Epilepsy Foundation of
America
1828 L Street N.W.
Washington, DC 20036

Family Service Association
of America
44 East 23rd Street
New York, NY 10010

Foundation for Child Development
345 East 46th Street
New York, NY 10017

International Association of Parents
of the Deaf, Inc.
814 Thayer Avenue
Silver Spring, MD 20910

John Tracy Clinic
Educational Materials Department
for Deaf-Blind
806 W Adams Boulevard
Los Angeles, CA 90007

Mental Health Materials Center
419 Park Avenue South
New York, NY 10016

Muscular Dystrophy Association
of America, Inc.
810 Seventh Avenue
New York, NY 10019

National Association for the
Education of Young Children
3700 Massachusetts Avenue
Washington, DC 20016

National Association for Mental
Health
1800 North Kent Street
Arlington, VA 22209

National Association for
Retarded Citizens
2709 Avenue E, East
Arlington, TX 76011

National Cystic Fibrosis
Research Foudnation
3379 Peachtree Road N.W.
Atlanta, GA 30326

National Easter Seal Society
2023 West Ogden Avenue
Chicago, IL 60612

National Institute of Mental
Health
Department of HEW
5600 Fishers Lane
Rockville, MD 20852

National Multiple Schlerosis
Society
257 Park Avenue South
New York, NY 10010

National Society for Autistic
Children
169 Tampa Avenue
Albany, NY 12208

National Society for the
Prevention of Blindness, Inc.
70 Madison Avenue
New York, NY 10016

Office of Child Development
P.O. Box 1182
Washington, DC 20013

Parenting Materials Information
Center
Early Childhood Program
Southwest Educational
Development Laboratory
221 East Seventh
Austin, TX 78701

Speech and Hearing Institute
61 Irving Place
New York, NY 10003

United Cerebral Palsy
Association, Inc.
66 East 34th Street
New York, NY 10016

COMPETENCY II:

Develop a General Knowledge of Seven Specific Handicapping Conditions

OBJECTIVE 1.0:

To Develop an Awareness of the General Characteristics, Major Causes and Educational Strategies For Working with Mentally Handicapped Children

Competency II: Develop a General Knowledge of Seven Specific Handicapping Conditions.

Objective 1.0	Content	Activities	Time	Pre/Post Questions
To develop an awareness of the general characteristics, major causes and educational strategies for working with mentally handicapped children	I. Introduction A. Prevalence B. Categories	Mini lecture: THE MENTALLY HANDICAPPED CHILD	10"	Worldwide, the leading cause of mental retardation is: a. chromosomal disorders b. infection c. child abuse d. malnutrition
	II. Characteristics A. Tendencies B. Categories	Handouts: CAUSES OF MENTAL HANDICAPS AND GENERAL TEACHING STRATEGIES	5"	
	III. Causes IV. Teaching Strategies	Panel presentation: THE IMPLICATIONS OF MENTAL HANDICAPS ON SOCIAL, ACADEMIC AND VOCATIONAL ACHIEVEMENT OF THE CHILD (Presenters could include ARC representative, special educator, parent, vocational counselor, Special Olympics coach)	15"	For the majority of mentally handicapped persons, retardation was caused: a. before birth b. at birth c. after birth d. cause cannot be determined
		Question and answer session	20"	Mildly mentally handicapped children may be diagnosed as developmentally delayed during their preschool years. true/false
		Task analysis: In small groups, trainees will break an assigned task into component parts to demonstrate how to teach to child.	10"	
		Presentations to whole group	5"	
		Discussion	10"	
		Videotape or film—classroom activities with mentally handicapped children	5"	
		Discussion of videotape or film	15"	
		Handout: GUIDE FOR PLACEMENT	5"	

HANDOUT

The Mentally Handicapped Child

Major Resources: Gearheart, Bill, Special Education for the '80s: Mental Retardation

Although estimates of the number of mentally handicapped individuals vary according to sources used, most authorities agree that between two and three percent of all people in the U.S. are mentally handicapped to some degree. This means that approximately 1.1 to 1.65 million school aged children are mentally handicapped and that for every 1,000 school aged children, 25 will be mildly mentally handicapped, four will be moderately mentally handicapped and one will be severely or profoundly handicapped.

Characteristics

Just as you and the person sitting next to you have characteristics which are similar and strengths and weaknesses which are very different, all mentally handicapped children cannot be lumped together. Some mentally handicapped children have physical characteristics which are easily recognized, such as the slanted eyes; large, broad tongue; and short fingers of the child with Down's Syndrome or the very large head of the hydrocephalic child. However, in general it is the degree of mental retardation which will help to characterize the mentally handicapped person's abilities. Some generalized characteristics associated with mentally handicapped individuals are:

- difficulty in following directions
- a tendency to imitate rather than create something on their own
- difficulty in thinking ahead to the results of their actions
- difficulty understanding anything they are not directly involved with at the time
- difficulty in paying attention and in learning
- difficulty transferring what they have learned in one situation to other situations
- difficulty understanding differences and similarities in objects or events (Example: a child cannot pick out the one cup that doesn't have a handle from a group of cups)
- tendency to be slower than most children in such developmental areas as walking, toilet training and talking
- tendency to exhibit delayed or poor motor coordination
- tendency to exhibit poor eye-hand coordination (Example: a six year-old child may be unable to stay inside lines when coloring large, simple objects)

In the past, IQ has often been used as the sole measure of the mentally handicapped individual's abilities. However, the commonly accepted view today is that both significantly below average intelligence and corroborating levels of adaptive behavior must be present before a child is judged mentally handicapped. These features are included in the American Association on Mental Deficiency's definition of mental retardation which states that "mental retardation refers to significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior, and manifested during the developmental period." According to this definition a child must score more than two standard deviations below the mean on IQ tests and does not behave with the degree of personal independence and social responsibility expected of this age and cultural group during the "developmental period"—birth to the child's eighteenth birthday.

The degree to which an individual is mentally handicapped can vary widely. Therefore, educators may speak of the "educable," "trainable," and the "severe or profoundly" mentally handicapped child. In general, most educable or "EMH" children can eventually become self-sufficient and can learn basic functional academic skills. Their IQ range is approximately 50 to 70, and many are mainstreamed—or placed in classes with their peers—for one or more subject areas. Many live independently or semi-independently (in group homes or supervised apartments, for example) in the community and are successful in holding down a job suited to their skill level. The EMH child is frequently not identified until placed in an academic setting; if diagnosed, the child is usually called "developmentally delayed."

The trainable, or TMH child, has a somewhat lower IQ range (approximately 25 to 50) and will have more limited success in learning traditional academic skills, but may be successful in mastering self care and simple vocational skills. The TMH child's development proceeds as 1/2 to 3/4 the role of other children his age, but with proper training can work in a sheltered workshop or well supervised job in the community and may live in a group home where moderate supervision is provided. The presence of a mentally handicapping condition is frequently identified at birth or during preschool years.

The severely/profoundly mentally handicapped child is usually identified at birth. While some may learn limited self help skills, acquire speech and even become proficient in simple job skills, most will require extensive supervision throughout their lives. Many times, children in this group will have other handicapping conditions as well, and motor development is usually quite slow.

Causes

The causes, or etiology of mentally handicapping conditions often cannot be traced to a single factor. However, there are a number of major categories into which the causitive factors might fall. These include infections and intoxications, trauma or physical agents, disorders of metabolism and nutrition, brain disease, unknown parental influence and chromosomal abnormalities. Factors leading to a mentally handicapping condition may be present before, during or after birth. While it is impossible to describe the more than 200 identified causes leading to mental handicaps at this time, some examples in each category will be given.

Infections and intoxications, whether prenatal or postnatal, are among the major causes of mental handicaps. The degree of mental retardation produced will depend on the number and location of damaged brain cells. Some common diseases and infections in this category are rubella (German measles) contracted by the mother, especially early in pregnancy; syphilis, which can damage the egg or sperm even before conception; hemolytic disease (destruction of red blood corpusles), often caused by Rh incompatability, and poisons such as lead poisoning or alcohol, drugs and narcotics.

Trauma or physical agents which cause a child to become mentally handicapped can happen at any time. Before birth, excessive radiation, an accident to the mother or lack of oxygen to the fetus may cause mental retardation. Trauma during birth caused by prolonged labor (over 24 hours), precipitous birth (under 20 minutes), lack of oxygen to the fetus or improper application of forceps may also be causitive factors. Any number of accidents such as skull fractures, stroke, electric shock, lack of oxygen from high fever or child abuse may cause an individual to become mentally handicapped.

Common metabolic and nutritional disorders which may result in mental handicaps include PKU (phenylketonuria), a failure to properly metabolize protein; galactosemia, an inability to metabolize milk sugar; and hypothyrodism, caused by a thyroid gland disorder. If diagnosed and treated early enough, these disorders may often be successfully treated through diet or hormones.

Brain disease includes a number of hereditary conditions resulting in tumors on the brain, often treated by surgical removal.

Hydrocephalus (enlargement of the cranial vault) and microcephalus (significantly small head circumference) are two conditions resulting in mental handicaps which are caused by unknown prenatal influence.

The most common chromosomal abnormality which results in a mentally handicapped child is Down's Syndrome, formerly called "mongolism." This condition, often caused by advanced maternal age, affects about 15,000 children each year, and is usually diagnosed at birth. The degree of mental retardation in a child with Down's syndrome can vary widely, although most are moderately handicapped.

Teaching Strategies

Successful educational strategies will depend on a variety of factors: the degree to which a child is mentally handicapped, the interest and willingness of the child to learn a particular skill, and the ability and interest of the teacher in using a specific approach. Some common strategies or techniques which have proved successful are briefly described below:

The multi-sensory approach uses all of the child's senses to help them to learn a specific concept and to reinforce that concept in a variety of ways. An attempt is made to help the child gain information from visual (seeing), auditory (hearing), tactile (touching), olfactory (smelling), gustatory (tasting), and kinesthetic (moving) clues.

Step-by-step learning uses "task analysis" or breaking a skill down into its most basic parts and presenting it in short, sequential steps to help a mentally handicapped child learn it.

The use of success-assured activities helps to develop confidence and a desire to learn on the part of the mentally handicapped child. A variety of approaches can be used to ensure that each child learns the skill in the manner most likely to lead to success.

Structure in the classroom is very important if the mentally handicapped student is to learn to the best of his abilities. The teacher should make an effort to remove distractors, divide the learning areas into activity centers, limit the number of students involved in a group, and maintain the attention of the student.

Behavior management is also important in successfully teaching any skill. The teacher should take care to use praise and positive reinforcement, to be consistent and not to threaten or punish. Successful behavior management strategies will aid in helping the mentally handicapped child to learn, regardless of the specific teaching strategies used.

HANDOUT

Causes of Mental Handicaps

It is difficult to discuss the causes of mental retardation accurately, because less than six percent of the cases of mental retardation have known causes, while 94 percent are unknown. Of the largest group of mentally retarded people, the mildly retarded, about 80 percent have unknown causes.

There are at least 200 different conditions that can cause mental retardation. Many of these conditions are named with lengthy medical terms. Causes of mental retardation are so numerous and varied that it is difficult to categorize them adequately. Damage which results in mental retardation can occur before (prenatal), during (perinatal), or after birth (postnatal).

Before Birth

This time is also called the "prenatal" period. It covers the period from conception to birth.

Damage to the unborn baby can result in the improper development of or injury to the child's brain. Prenatal causes of mental retardation can include:

1. Infections and Diseases:

    a. Toxoplasmosis--This is a condition caused from eating infected raw meat or from being around the feces of cats that have eaten such meat.

    b. Syphilis--The bacterium of congenital syphilis can damage the egg or sperm before conception occurs. The fetus can also be damaged if the mother contracts syphilis during the pregnancy. In most cases, the central nervous system of the fetus is damaged, resulting in mental retardation.

    c. Radiation--There is danger to the fetus if the mother receives x-rays (particularly in the middle area of the body) during pregnancy. There is also evidence that x-rays received in the months prior to pregnancy by either the mother or father can cause damage.

    d. Encephalitis--This is a form of brain inflammation. Occasionally, it develops after an attack of high fever brought on by some other illness such as measles, chicken pox, whooping cough, pneumonia, or meningitis.

e. Rubella (German measles)--Although this is a mild disease in children, it can be dangerous for the fetus of the pregnant woman. Rubella contracted during the first three months of pregnancy can result in mental retardation, deafness, eye defects, or other disabilities. Rubella can be controlled by use of routine immunization. Because the vaccine contains a live rubella virus, it is not safe for women during pregnancy or even shortly before conception.

f. Cytomegalo virus--This viral infection can cause damage or death to the fetus. In some cases the mother may not even be aware that she has an infection.

g. RH disease--This is a blood problem in which antibodies from the mother's blood destroy red blood cells in the infant and cause a build up of poisons that destroy brain cells. This blood incompatibility results from the mother having an Rh- factor in her blood and the infant having an Rh+ factor (inherited from the father) in its blood). Giving the baby all new blood by transfusion before or after birth can overcome this problem. An Rh vaccine can now be given to the Rh- mother after the first Rh+ baby is born, to prevent the problem in future pregnancies.

2. Drugs

Any drug can cause injury to a fetus and should be taken by a pregnant woman only under a doctor's care (including aspirin and cold medications).

3. Accidents

Any fall or accident that involves the mother can damage the fetus.

4. Chromosomal Disorders

Chromosomes are rod-shaped structures in each cell that carry all the information that determines inherited characteristics such as color of eyes, type of hair, sex, mental capacity, etc. The normal cell contains 46 chromosomes. During conception these chromosomes and their heredity information are transferred to the embryo (beginning baby). An extra, damaged, or missing chromosome will result in a chromosomal disorder.

Down's Syndrome is the most common chromosomal disorder resulting in mental retardation.

5. Malnutrition

Poor diet in the mother can deprive an unborn infant of substances essential to proper development. The central nervous system's greatest development occurs before birth and during the first year after birth. Protein deficiency during this time can damage a child's mental capacity.

6. Alcohol

Research shows that alcoholic mothers are more likely to have mentally retarded children than non-alcoholic mothers. Whether this is due to the malnourished conditions of the mother or the alcohol itself is not clearly understood.

During Birth

1. Premature Birth

Children weighing less than 5 lbs. 8 ozs. (2500 grams) at birth are considered premature. Because all of the systems in the body are usually not fully developed until the nine months of pregnancy are completed, there is a higher risk in "premees" than in full term babies for physical and mental problems.

2. Birth Injury

When labor is too quick, it can cause bleeding inside the baby's head. When labor is too long, it can result in a lack of oxygen to the baby's brain (anoxia). If the umbilical cord separates or collapses before the baby breathes on his/her own, it results in a lack of oxygen to the baby's brain. Excess anesthesia during delivery can slow down the baby's breathing.

3. Drug-Related Withdrawal Symptoms

This can occur in babies born of drug addicted or alcoholic mothers. If not treated immediately, the baby can experience tremors, hyperactivity, vomiting, fever, convulsions, and coma.

After Birth

1. Malnutrition

Malnutrition is considered to be the leading worldwide cause of mental retardation. As the child's brain grows, it requires certain essential substances to insure proper development. A diet lacking in these substances will result in mental retardation.

d. Hypothyroidism--This disorder can result in mental retardation because of defective thyroid function. Proper thyroid function is necessary for adequate brain cell metabolism.

e. Hydrocephaly--This is an unusually large head often caused by too much fluid retained in the brain. Damage results from excess pressure in the brain which destroys cells.

f. Microcephaly--This means undersized skull. It may be caused by premature closing of the bones of the skull either before or soon after birth (also called craniostenosis) or by lack of growth of the brain.

g. Galactosemia--This is an inability by the body to properly metabolize milk sugar. Newborn infants can be tested and put on a special diet for this disorder.

7. Environmental Deprivation

This is a condition in which the people and events that surround a child have failed to meet his/her basic physical, emotional and social needs. The child's surroundings have failed to stimulate his/her thinking and thus ability to grow and learn and discover become damaged.

8. Convulsive Disorders

Convulsive disorders (seizures) can cause brain damage if the seizures are severe and uncontrollable with medication.

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HANDOUT

General Teaching Strategies

It is important to help mentally handicapped children gain skills that advance them to the limit of their potential. Most teaching strategies/techniques are applicable to mentally handicapped children as they are to the nonhandicapped. However, the effectiveness of a particular strategy relies heavily on the teacher's ability to use it as well as his personal feelings toward it.

Multi-Sensory Approach

Multi-sensory approach refers to teaching children through the use of all of their senses:

1. visual--information gained from seeing
2. auditory--information gained from hearing
3. tactile--information gained from touching or feeling
4. olfactory--information gained from smelling
5. gustatory--information gained from tasting
6. kinesthetic--information gained from movement and the position of muscles within the body

Information is received by the senses and is sent to the brain where it is processed and made meaningful. Using as many of the sensory channels as possible in teaching a concept or task helps a child learn.

It is more difficult for mentally handicapped children to learn; therefore, it is especially important to use the multi-sensory approach with these children because it helps them become totally involved in a learning situation. Since mentally handicapped children do not learn well simply by having things told or read to them, it is important to use a very concrete way of teaching--the multi-sensory approach.

Examples of teaching activities using the multi-sensory approach are:

1. Teach body parts by playing a game in which the children rub damp wash cloths on their arms, legs, faces, chest, and tummies as they sing a body parts song, "This is the way we wash our arms, etc." The children feel the wet wash cloth on the body part as they hear the word for the part and see the part they rub.

2. Teach about an orange by having the child feel and smell one, look at its color, say "orange," then cut it open, squeeze it and drink the juice.

3. Teach the letter of the alphabet by saying "This is a 'G'", while the child looks at it. Then have the child trace around a sandpaper "G" with the fingers or a crayon while saying its sound.

4. Use a picture or chart to help a child visualize a story or set of instructions. If the child only hears the story or instructions, the information might be meaningless. Using "visuals" to describe the actions you are talking about helps the child learn.

5. Model an activity (go through an activity yourself with the child watching as you describe what you are doing). Modeling uses the child's senses of hearing and vision. "Watch me stack these blocks."

6. Give physical assistance to the child and actually move him/her through an activity to help the muscles get the feel of what needs to happen. Teach a child to take off a coat by physically moving him/her through each step in the process and talking about what she/he is doing. "Your coat is unzipped, let's move your hand and arm out of the sleeve, etc."

Step-By-Step Learning

Step-by-step learning or "task analysis" is an important technique when teaching mentally handicapped children.

Most skills are more complicated than at first realized. They require breaking down into short, simplified, sequential steps so a child can learn one step at a time and feel success. A child who is learning "step-by-step" needs plenty of time to repeat a step until it is mastered before moving on to the next step.

Two possible ways of using step-by-step learning are techniques called frontward chaining and backward chaining. In frontward chaining you teach the first step in a series of steps first. In backward chaining you teach the last step of the desired behavior first.

Frontward Chaining. Begin by teaching the first step of the desired behavior. As each additional step is taught, it is added to those that the child can do until the entire series is complete. For example, if you want the child to build a tower of five blocks, the first step would be to put one block on a table. The second step would be to stack two blocks. The third step would be to stack one more block and so on until all fiive blocks were stacked.

Backward Chaining. Begin by teaching the last step of the desired behavior first. Then have the child complete the last two steps of the task and continue until the entire series is complete from the last to the first step. The child is praised for the finished task and experiences the feeling of accomplishment as she/he does more and more of the task independently. Some activities, especially self-help skills, lend themselves to the backward chaining approach. For example, if you want to teach a child to put on a pair of pants:

Step 1: Start with the pants on almost up to the child's waist. Have the child help pull them to the waist. Praise the child by saying, "good putting on pants."

Step 2: Start with pants on the child's legs, near the ankles. Have the child pull them up independently. Praise the child by saying, "very good . . . that's nice work."

Step 3: Hold out one pants leg and teach the child to put his/her feet into the pants one foot at a time. Then have the child pull up the pants. Praise the child by saying, "I like the way you put on your pants."

Step 4: Teach the child to put in both feet independently and pull up the pants. Praise the child by saying, "good putting on your pants."

Step 5: Hand the child the pants in the proper position and have the child put them on independently. Praise the child by saying, "good job."

Step 6: Teach the child the front and back of the pants as well as the top and bottom, and have the child put them on independently. Praise the child by saying, "good putting on your pants."

Step 7: Give the child the folded pants and have the child lay them out and put them on correctly. Praise the child by saying, "I'm proud of the way you put on your pants."

This process of breaking down tasks is necessary for whatever task you teach special children.

Success-Assured Activities

It is important to plan activities in which the mentally handicapped child can experience success. Failure breeds failure and results in a fear of trying new things. Success helps develop confidence and a desire to learn more.

The following are some techniques that will help assure success:

1. Step-by-step learning--Breaking down tasks into small achievable steps provides the child many opportunities for success.

2. Physical assistance--Guiding or moving the child through an activity until she/he can do it along helps assure success. It is better to guide the child through to the correct responses (this is called errorless learning) than to waste time on trial and error technique.

3. Teaching at the appropriate level--There are three teaching levels to be aware of:

   a. a tolerance level at which the child works easily using skills already learned (independent level)

   b. a challenge level at which it is slightly difficult to even try the task (instructional level)

   c. a frustration level at which it is too difficult to even try the task

   Everyone learns best at the first two levels. Children enjoy activities they can do well, but they feel overwhelmed and defeated with things that are constantly frustrating to them.

4. Avoiding drastic changes in activities--Mentally retarded children frequently have difficulty moving from one activity to another. A teacher needs to help the child gradually adjust to a new situation. Tell the child what activity is coming next and help make the transition smoothly. For example, if the child is playing a quiet game alone, she/he shouldn't be asked to quickly join a noisy, active game with a large group of children. Include the child in an activity with a small group first, then later move him/her into the larger group.

5. Repetition--Chilren with learning difficulties often have short attention spans. They don't learn well in activities that require concentrating for long periods of time. They learn best when activities are short and repeated many times. Often their memory spans are short so it is important to repeat the same activity in the same sequence of steps each day until it becomes automatic.

6. Practice--Once children have mastered a particular skill, they need to "try out" their new skill at different times, in different settings, and with different materials. A child might learn how to tie tennis shoes, but be lost when asked to tie brown leather shoes. Learning to tie different kinds of shoes is the kind of practice the child will need.

7. Behavior modification--When a child is rewarded or reinforced with something positive when she/he behaves appropriately and is ignored when she/he behaves inappropriately, the process is called behavior modification. A behavior that is followed by a meaningful reward is likely to be repeated. A behavior that is not rewarded is not likely to be repeated. Praise is usually a very meaningful reward if given immediately after a correct behavior. Some children need what is called a concrete reinforcement like cereal bits or color chips they can trade in for play time. Let the children show and tell what rewards they prefer. Praise should always be given along with concrete reinforcement so that later the praise can be substituted for the concrete reward. As a child begins to learn new behavior, rewards should still be given but with less frequency than when the child first started.

Structure in the Classroom

Structure is provided when a routine is followed, or when activities are planned so that children will know what to expect next. Mentally handicapped children do not learn by just absorbing what is going on around them. They might be content to sit on the fringe and watch. They need to be directly involved in a specific, structured learning activity in which they are required to respond by moving or talking. Often instruction on a one-to-one basis is necessary.

The following techniques will help provide structure for mentally retarded children:

1. Remove distractors

   Make sure the child is not bombarded with too many materials and toys at once. Arrange teaching settings so that they are not cluttered or confusing. Remove materials the child does not need to pay attention to, and limit materials available to that which the child can handle without becoming distracted. Many mentally retarded children are easily distracted by too many things going on around them. They cannot filter out the important details from all the things they hear and see.

2. Divide areas

   A mentally retarded child will react best to places that are divided into activity areas--a nap area, an art corner, a quiet reading area. Different areas give clues about the types of stimuli the child can expect and about the items on which the child needs to focus.

3. Limit numbers

   Mentally retarded children often work best in small groups in which a lot of individual attention can be given. In addition, children are usually less distracting to each other in small groups than they are in large groups.

4. Maintain attention

   When teaching any activity be sure to hold the child's attention. Say, "Look at me," and maintain frequent tactual and visual contact with the child. If a child is not paying attention, nothing can be learned from an activity.

Behavior Management

Behavior management (or discipline) is extremely important for the mentally handicapped. More adults with mental handicaps lose jobs because of their lack of social skills (getting along with others) than for any other reason. The following techniques have helped children learn these needed skills.

1. Use praise and positive reinforcement for desired behavior and ignore unwanted behavior, if possible.

2. Teach the child to listen, to take turns, to stay with the class, to eat appropriately, to use the bathroom correctly, and to control impulses.

3. Remember to treat each child and situation individually since no "rules of thumb" work for all children.

4. Be consistent. Decide what limits are necessary and stick to them.

5. If a child becomes too excited or uncontrollable in a group, isolate the child for a short time. Moving a child to another part of the room is one way of achieving isolation. Frequently the child will decide when she/he is ready to join the group again. Long periods of isolation are ineffective.

6. Never use physical pain, insults, or fear as management techniques.

7. Don't threaten. A child's memory is short and threats will soon be forgotten.

8. Don't punish by putting the child to bed--this may cause the child to think of normal bedtime as punishment.
9. Don't punish by saying, "I won't love you." The child will respond better if she/he knows she/he is loved.
10. Friendly firmness rather than punishment is basic for discipline.
11. Give a warning when changing activities such as, "In five minutes we will stop painting."
12. Be sure the child understands what is expected. Telling usually isn't enough. The child must be shown. "Let me show you where to put these messy paint brushes."
13. Tell the child what to do rather than what not to do. Say, "put your cup on the table" rather than "don't throw your cup on the floor."
14. Act as if you expect the child to cooperate and she/he usually will.
15. Give one direction at a time and keep it simple.

A child who is being stubborn or uncooperative may be hungry, tired, ill, uncomfortable, or having an emotionally difficult time.

Be aware of the child's mental age and capabilities. Expecting too much from a child can result in frustration, anger, and unhappiness for the child and the teacher. Expecting too little can result in boredom and lack of educational stimulation for the child.

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COMPETENCY II:

Develop a General Knowledge of Seven Specific Handicapping Conditions

OBJECTIVE 2.0:

To Develop an Awareness of the General Characteristics, Major Causes and Educational Strategies For Working with Hearing Impaired Children

Competency II: Develop a General Knowledge of Seven Specific Handicapping Conditions.

Objective 2.0	Content	Activities	Time	Pre/Post Questions
To develop an awareness of the general characteristics, major causes and educational strategies for working with hearing impaired children	I. Introduction A. Definition B. Degrees of hearing loss C. Types of hearing loss	Presentation/Handout: HOW WE HEAR AND DIAGRAM	5"	Moderate hearing loss (41-55 dB) may require special seating arrangements and special education services but will not usually require hearing aids. true/false
	II. Characteristics A. Influential factors B. Identifying behaviors	Mini lecture: THE HEARING IMPAIRED CHILD	10"	
		Handout/Discussion: GENERAL TECHNIQUES FOR HEARING IMPAIRED STUDENTS	15"	A person born with normal hearing whose hearing has become non-functional through accident or illness is called: a. congenitally deaf b. adventitiously deaf c. hard of hearing d. functionally deaf
	III. Causes IV. Teaching Strategies A. Methods B. Techniques	Demonstration: BASIC SIGNS (should include finger spelling, common signs--yes, no, bathroom, sit, eat, drink, etc., and some "fun" signs--names of people in a group)	20"	
		Simulation activity: Wearing ear plugs, trainees should be asked to participate in group activity or game. Signing should be allowed but not speech	10"	Which of the following is not a usually identified cause of deafness? a. toxoplasmosis b. German measles contracted by mother during pregnancy c. Rh incompatibility d. family history of deafness
		Discussion of simulation--implications for the educationals setting	10"	
		Handout: RELATIONAHIP OF DEGREE OF IMPAIRMENT ON EDUCATIONAL NEEDS	5"	
		Videotape or film--Classroom activities with hearing impaired children	5"	
		Discussion of videotape or film	15"	

MINI-LECTURE

The Hearing Impaired Child

Persons described as "hearing impaired" may have difficulty in hearing in one or both ears or they may not hear at all; the hearing loss may be severe or profound. Hearing impaired individuals who are able to understand human speech, either with or without the assistance of a hearing aid may also be referred to as "hearing impaired." A person who cannot understand human speech even with a hearing aid and whose hearing is non-functional for the usual purposes of life is considered "deaf." The term "congenitally deaf" refers to deafness at the time of birth. Deafness which is acquired after birth is called "adventitious deafness."

The degree of hearing loss experiences by a hearing impaired individual is based on the sensitivity to sound, measured in decibels. A decibel (dB) is a unit measuring the intensity or loudness of a sound. A very quiet conversation registers 20 decibels, normal conversation is 60 decibels, and a riviting machine at 30 feet measures 100 decibels. In describing hearing impairment, the higher the decibel loss, the more severe the impairment. Mild or slight hearing loss (27-40 decibels) may require special seating in the classroom. A student with mdoerate hearing loss (41-55 decibels) may require special seating arrangements as well as hearing aids and/or other special educational services.

A child with moderately severe hearing loss (56-70 decibels) will require individual hearing aids and will require special assistance in vocabulary and speech development. A more severe hearing loss (71-90 decibels) usually classifies the student as deaf, although he may be able to hear loud sounds at a close distance; intensive special education services will be required. Profound hearing loss (91 decibels or more) requires special educational programming; speech and language may not develop without intensive instruction.

There are several ways to differentiate types of hearing loss. Conductive loss occurs when sound waves are not conducted to the inner ear due to problems in the middle or outer ear. Hearing impairment caused by problems with the inner ear is called sensorineural loss. In this instance, sound is properly conducted, but is not converted into a message which can be passed on to the brain. Mixed losses refer to hearing impairments which involve both conductive and sensorineural losses.

Estimates are that there are between 275,000 and 385,000 hearing impaired children between the ages of 5 and 18 (Gearheart, p. 122), or that approximately 0.5 to 0.7 percent of the school aged population has some degree of hearing loss.

Characteristics

The amount of hearing loss is not the only factor which will influence behavior and achievement in the hearing impaired child. Another factor which must be taken into consideration when planning educational programs is the age at which the hearing loss occurred. Whether the onset of the impairment took place before or after the development of language will be important in determining the type and extent of special education services necessary. This factor will also influence the extent to which the student will be able to comprehend written language and master oral speech. Other factors such as previous remedial instruction and general intelligence will also need to be considered.

Some characteristics which might be observed in a child with a hearing impairment are (Gearheart, pp. 123-124):

- lack of attention
- turning or cocking the head
- difficulty in following directions
- acting out, stubborn,shy or withdrawn behavior
- reluctance to participate in oral activities
- dependence on classmates for instructions
- best achievement in small groups
- speech defects
- disparity between expected and actual achievement
- medical indications

The possibility of hearing impairment should also be considered when a child one year or older does not imitate sounds and simple words; responds primarily to loud sounds and voices; often asks "huh?" or "what?"; draws away from the group or plays alone; seems resentful or annoyed, and avoids people; or seems restless and strained and shows exhaustion and fatigue early in the day.

Causes

The causes of hearing impairment are quite varied and, in some instances, unknown. Hereditary deafness is the most commonly cited cause, followed by rubella (German measles) contracted by the mother, especially during the first three months of pregnancy. Other widely recognized causes are prematurity; Rh incompatability; diseases such as meningitis, scarlet fever, measles, and frequent or severe colds; ear diseases, or an operation; excessive noise levels; or head injuries.

Specific infections or diseases which can result in hearing impairment include otitis media, and inflamation of the middle ear and otosclerosis, a bone disease resulting in bony growth in the areas surrounding the inner ear.

Teaching Strategies

There is some disagreement among special educators regarding the most appropriate means of teaching hearing impaired students. Some advocate the use of teaching methods which will develop a child's speech and ability to understand the spoken word to the highest degree possible. These oralists encourage the child to express himself through speech rather than through the use of manual signs or gestures. Total communication on the other hand includes whatever communication methods—aural, manual and oral—are most appropriate to help the hearing impaired individual communicate effectively with those around her. This approach, which incorporates lip-reading, use of manual sign language and the development of whatever verbal communication is possible is becoming more popular today.

The most commonly used method of manual communication in the United States is American Sign Language (ASL). However, other methods, such as Seeing Essential English (SEE), Signing Exact English (SEE_2), Linguistics of Visual English (LOVE) and Signed English have been developed in recent years in an attempt to better represent the English language. In some cases this leads to confusion among hearing impaired individuals proficient in only one system. This confusion is furthered by regional signs and "dialects."

Regardless of the educational approach being taken in a specific special education setting, there are some general teaching strategies which will maximize communication with the student. When speaking to a hearing impaired child, get down to her eye level and come close to the child, if at all possible. This will help the student to take advantage of any hearing he has and will make the difficult task of lip reading a little easier. It is also helpful to get the full attention of the child before giving instructions, and to face the light when speaking to a child with a hearing impairment so that the light does not interfere with this ability to lip read. Speak naturally in short and simple, but whole, sentences, rephrasing questions and new ideas several times to help the student who may have missed a word when the idea was first presented. Careful attention should be given to the placement of the hearing impaired student's desk so that there is maximum visibility of the teacher and so that the light is not in the student's eyes.

Use a variety of sensory approaches when communicating with a hearing impaired child. Give visual clues to what is being said and use signs, chants and photographs when appropriate. Use manual communication—sign language and finger spelling to reinforce verbal communication. Music signs are easy and fun to learn. Remember to praise the hearing impaired child for listening well and for communicating—either verbally or manually—well. Take time to make sure that directions and other information have been understood by the student, and give the child plenty of opportunities to talk and to take part in classroom activities.

HANDOUT

Hearing Impaired

Students with hearing impairments may have difficulty in hearing in one or both ears or they may not hear at all. The hearing loss may be severe or profound. For example, the following classifications might be encountered in working with hearing impaired children:

A. CLASSIFICATIONS

1. Hard of Hearing--Although hearing is defective, the ability to hear is functional and may or may not include a hearing aid.
2. Deaf--Hearing is nonfunctional for usual purposes of life.
   a. congenitally deaf--born deaf
   b. adventitiously deaf--born with normal hearing but hearing became nonfunctional through an illness or accident

B. DEGREES OF HEARING LOSS

1. Mild or slight hearing loss (27-40 decibels) may require special seating in classroom.
2. Moderate hearing loss (41-55 decibels) may require special seating arrangements, hearing aids and other special educational services as lip reading, etc.
3. Moderately severe hearing loss (56-70 decibels). Requires individual hearing aids and special education services.
4. Severe hearing loss (71-90 decibels). Usually classified as deaf although may be able to hear loud sounds at a close distance. Requires intensive special education services.
5. Profound hearing loss (91 decibels or more). Requires special educational programming and speech and language may not develop without intensive instruction.

However, in any grouping children may exhibit different behaviors because other factors must also be considered such as the age at onset of hearing loss, intelligence, type of hearing loss, when did remedial instruction begin and the quality of instruction, etc. Thus, each child should be assessed for his/her strengths and weaknesses. Knowing how hearing normally works helps in understnading the different things that can go wrong with the hearing process.

Causes of Hearing Impairment

The causes of hearing impairment are quite varied and, in some instances, unknown. The following include the most frequently cited causes.

1. Family history of deafness
2. German measles contracted by mother during first three months of pregnancy
3. Prematurity
4. Rh incompatibility
5. Disease such as meningitis, scarlet fever, measles, frequent or severe colds
6. Ear disease, pain, discharge, operation
7. Injuries to the child's head

HANDOUT

RELATIONSHIP OF DEGREE OF IMPAIRMENT ON EDUCATIONAL NEEDS*

Average of the speech frequencies in better ear	Effect of hearing loss on the understanding of language and speech	Educational needs and programs
SLIGHT 27-40 dB (ISO)	May have difficulty hearing faint or distant speech. May experience some difficulty with the language arts subjects.	Child should be reported to the school principal. May benefit from a hearing aid as loss approaches to 40 dB (ISO). May need attention to vocabulary development. Needs favorable seating and lighting. May need lipreading instructions. May need speech therapy.
MILD 41-55 dB (ISO)	Understands conversational speech at a distance of 3-5 feet (face to face). May miss as much as 50 percent of class discussions if voices are faint or not in line of vision. May exhibit omitted vocabulary and speech abnormalities.	Child should be referred to special education follow-up. Individual hearing aid by evaluation and trianing in its use. Favorable seating and possible special class placement, especially for primary children. Attention to vocabulary and reading. Lipreading instruction, speech conversation and correction, if indicated.
MARKED 56-70 dB (ISO)	Conversation must be loud to be understood. Will have increased difficulty in group discussions. Is likely to have defective speech. Is likely to be deficient in language usage and comprehension. Will have limited vocabulary.	Child should be referred to special education for educational follow-up, resource teacher, or special class. Special help in language skills: vocabulary development, usage, reading, writing grammar, etc. Individual hearing aid by evaluation and auditory training. Lipreading instruction. Speech conversation and correction. Attention to auditory and visual situations at all time.
SEVERE 71-90 dB (ISO)	May hear loud voices about one foot from the ear. May be able to identify environmental sounds. May be able to discriminate vowels but not all consonants. Speech and language defective and likely to deteriorate.	Child should be referred to special education for educational follow-up. Full-time special program for deaf children, with emphasis on all language skills, concept development, lipreading and speech. Program needs specialized supervision and comprehensive supporting services. Individual hearing aid by evaluation. Auditory training with individual and group aids. Part-time in regular classes only as profitable.
EXTREME 91 or more dB (ISO)	May hear some loud sounds but is aware of vibrations more than tonal pattern. Relies on vision rather than hearing as primary avenue for communication. Speech and language defective and likely to deteriorate.	Child should be referred to special education for educational follow-up. Full-time in special program for deaf children, with emphasis on all language skills, concept development, lipreading and speech. Program needs specialized supervision and comprehensive supporting services. Continuous appraisal of needs in regard to oral and manual communication. Auditory training with group and individual aids. Part-time in regular classes only for carefully selected children.

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*Adapted from Kirk, Samuel, Educating Exceptional Children, Second edition.

HANDOUT

How We Hear*

There are three main parts of the ear: the outer ear, the middle ear, and the inner ear. (See diagram on page following.)

The outer ear collects and directs sound waves into the middle ear section. The outer ear consists of the external ear and the auditory canal. The outer ear also serves as a protective device for the delicate inner ear parts.

The middle ear, a space filled with air, contains the ossicular chain and is separated from the outer ear by the eardrum. Another name for the eardrum is tympanic membrane. The ossicular chain is made up of three small bones which are named according to their shape. They are the hammer (malleous), the anvil (incus), and the stirrup (stapes). The hammer is attached to the ear drum; the anvil is attached to the hammer on one side and the stirrup on its other side; and the stirrup is attached to a window that leads to the inner ear. The middle ear has an opening to the outside through which this space obtains its air. This opening leads into a tube, the Eustachian tube, which has its outer opening in the back part of the nose where the nose joines the throat.

The inner ear contains the cochlea, auditory nerve, and the center of balance. The auditory nerve leads to the brain and its center of hearing.

Sounds are collected by the outer ear and these sound waves travel through the auditory ear canal to strike the eardrum. The eardrum vibrates and sets the bones in the middle ear into vibration. These vibrations differ according to whether the sound is high, low, soft, or loud. Sounds travel across these bones to the oval sindow to which the stirrup is attached. They then travel through the oval window into the cochlea, which is filled with a watery fluid and many small "hair cells" which move when the inner fluid vibrates. Different hair cells react to different types of sound. It is the motion of these cells that sends impulses down the auditory nerve to the brain, which then interprets the sound that is heard.

If we are to hear normally, the outer ear must be clear and open to receive the sound waves; the eardrum must be intact and able to vibrate; the middle ear must be filled with air and its bones able to vibrate; and the inner ear must always be able to receive and transport all sounds transmitted to it.

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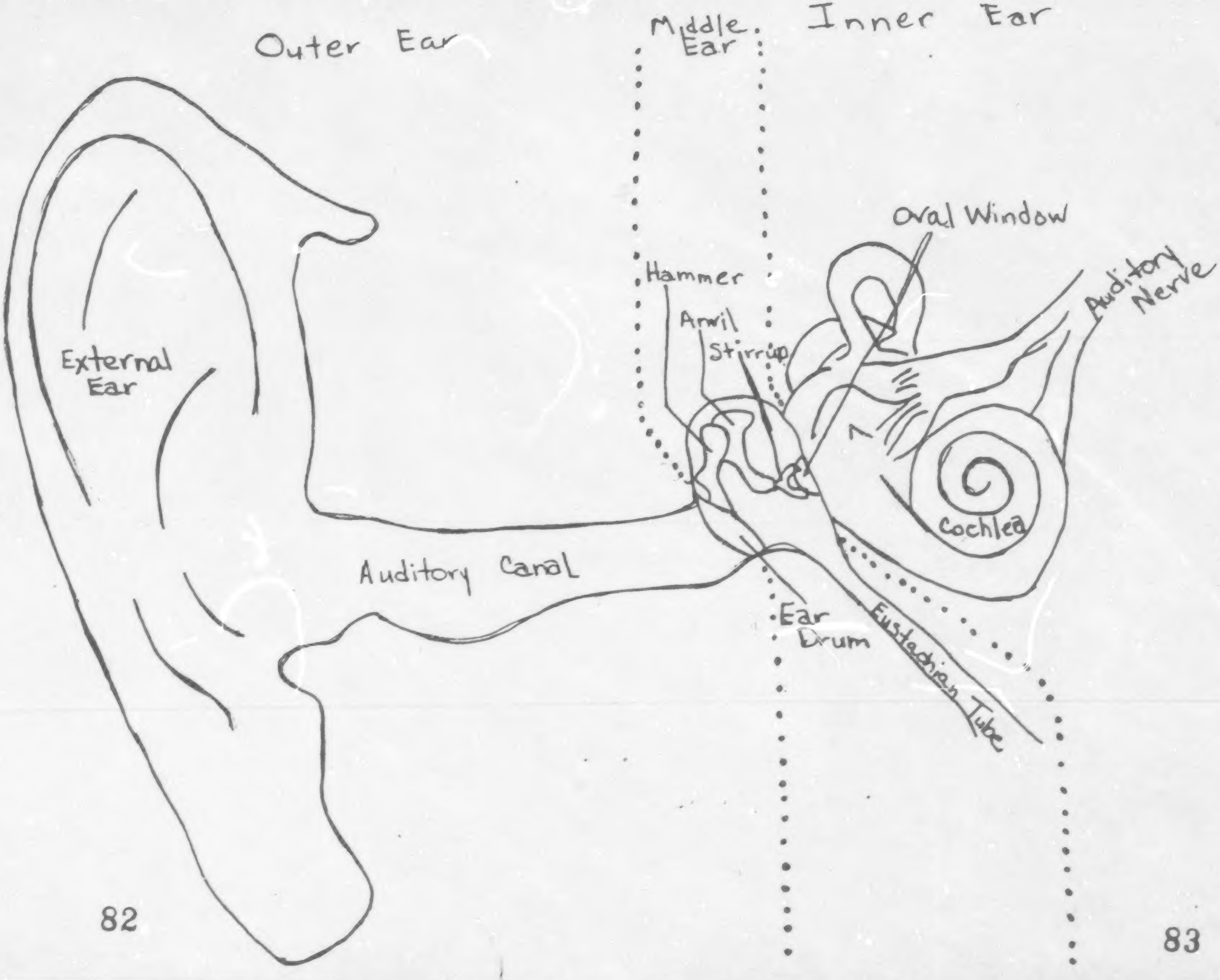
*Reprinted with permission from Hearing Disabilities. Anchorage, Alaska: Easter Seal Soeicty for Alaska Crippled Children and Adults, 1977, pp. 30-31.


Outer Ear
Middle Ear
Inner Ear
External Ear
Hammer
Anvil
Stirrup
Oval Window
Auditory Nerve
Cochlea
Auditory Canal
Ear Drum
Eustachian Tube

HANDOUT

General Teaching Techniques for Hearing Disabled Students

The number one rule in working with hearing impaired students is to talk to them at every possible opportunity. Children normally learn to use words after they have heard the sounds in those words used over and over again. Students with hearing difficulties often have to learn by watching (lip reading) and using a proper hearing aid. This process of learning takes much longer than learning by sound alone. Chidlren with hearing impairments need every chance they can to see speech. Even though you know the child you are working with cannot hear what you are saying, talk to him/her.

Get down to the child's eye level. Lipreading is difficult. Having the speaker's lips on the same level as the child's eyes makes the task a little easier.

Come close to the child when you talk. If the child has an residual hearing, she needs to be close to the sound if she is to hear it. Also, it is difficult to lipread from a distance.

Speak naturally. Use your normal voice at a moderate rate of speed. Exaggerating your words or speaking more slowly than usual confuses the child.

Speak in short and simple but whole sentences. Do not use baby talk. If the child is exposed only to incomplete sentences, that is all the child will learn. The goal is to teach the child normal language.

Face the light when speaking to a child with a hearing problem. If the light is behind the speaker's back the child will have trouble lipreading.

Seat the child near the front of the classroom where she/he can read your lips and follow classroom activities more easily. If she does not wear a hearing aid, the better ear should be toward the teacher and the rest of the class. If she wears a behind-the-ear aid, the ear with the aid should be toward the teacher and the class. The child should sit on the window side of the room so that she is not facing the sunlight while attempting to lipread the teacher or classmates.

Give visual cues to what you are saying. Touch the object you are talking about. Let your face show what you are feeling. Manual communication (sign language and fingerspelling) provides very special clues used by deaf children, their families, and friends. Manual communication is not difficult to learn and can do much to help a deaf child grow normally in all areas.

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Use music and rhythm activities in order to increase auditory stimulation. Let the children feel the sounds of a drum or piano. Encourage hearing impaired children to play instruments and join in rhythm games. Rhythm can be seen and felt, as well as heard.

Seat the hearing impaired child close to you in group activities so she can lipread better, hear the sounds she is capable of detecting, and get visual cues to what is happening.

Learn the proper care and use of the hearing aid if a child you are working with wears one.

Be aware of some side effects in children with hearing losses. The inability to communicate can be very frustrating. Sometimes hearing impaired children develop emotional and behavioral difficulties because of their frustration.

Repeat directions and comments when you doubt if they are understood.

Give hearing impaired children lots of praise when they listen well. It takes more energy for them to listen. Praise them for talking, too.

Ask them lots of questions to make sure the hearing impaired child understands directions and/or stories. Questions requiring answers other than "yes" or "no" help you check the child's comprehension.

Give the child lots of opportunities to talk. Some things that encourage talking are toy telephones, puppets, walkie-talkies, tape recorders, and animals.

COMPETENCY II:

Develop a General Knowledge of Seven Specific Handicapping Conditions

OBJECTIVE 3.0:

To Develop a Knowledge of the Characteristics, Causes and Teaching Strategies For Working with the Speech and Language Impaired Child

Competency II: Develop a General Knowledge of Seven Specific Handicapping Conditions.

Objective 3.0	Content	Activities	Time	Pre/Post Questions
To develop a knowledge of the characteristics, causes and teaching strategies for working with the speech and language impaired child	I. Introduction A. Definitions B. Prevalence	Mini lecture: THE SPEECH AND LANGUAGE IMPAIRED CHILD	10"	Early identification and treatment of language and speech disorders also reduce behavior problems. true/false
	II. Characteristics A. Speech problems B. Receptive language problems	Handout: SPECIFIC TEACHING TIPS	5"	Echolalia is primarily of problem of a. hearing loss b. receptive language c. expressive language d. speech difficulty
	III. Causes A. Biologic B. Functional	Panel presentation: THE IMPLICATIONS OF SPEECH AND LANGUAGE IMPAIRMENTS (Panelists could include a speech therapist, special education teacher, a parent and an impaired student)	15"	Loud play and screaming may result in a husky and hoarse voice. true/false
	IV. Teaching Strategies	Question and answer session	15"	
		Videotape or case studies of speech and language impaired students in classroom settings	5"	
		Discussion of implications, brainstorming of teaching strategies	15"	
		Activity session in which trainees play a game or complete a problem while all or some simulate: a) speech difficulties, b) receptive language problems, c) expressive language problems	10"	
		Discussion of simulation exercise	10"	

MINI-LECTURE

The Speech and Language Impaired Child

Language is the tool by which we learn new ideas, store information, share thoughts with others, and solve problems. Hardly an hour goes by that we do not use some form of language. Most children develop language and speech skills informally with no special help or attention. As adults we take for granted the ability to listen, understand, think, and talk.

Some children, however, do not learn to talk automatically and need special help in developing language and speech skills. Some children cannot receive or hear what is said because of ear problems. Think about the last time your ears were stopped up from a bad cold; think about watching television with the sound turned off. You see a person's mouth moving and know something is happening, but you do not hear the words. Some children are able to hear, but do not understand what is said. This is like being in a foreign country and having others speak to you in a language you do not understand. From facial expressions and gestures you know that you are expected to answer. Although you "hear," you do not understand the words and find yourself cut off from many things.

Other children have difficulty in using words. They may receive information or hear, and they may understand what is said, but they cannot express themselves clearly. Words and sounds are jumbled, and although the child may want to communicate with others, he or she cannot speak well enough to be understood.

Estimates are that 2-3 percent or 1,650,000-2,200,000 of all school-aged children have some type of speech or language impairment. In the case of some 5, 6, and 7 year olds, speech or language difficulties may be temporary or very minor; other students will require intensive special education services to overcome their disabilities.

The sooner children with language and speech disabilities receive help, the better their chances for developing normal speech and language. Early identification and treatment of language and speech disorders also reduces behavior problems which may develop when a child is frustrated about the inability to communicate.

Characteristics

Children with speech and language impairments may have difficulties with only their ability to speak or may have problems with receptive or expressive language. Receptive language problems refer to the inability of a person to understand or comprehend what is being said to them. Some children are unable to receive information because of a physical problem--they cannot hear. For other children, there may be no identifiable physical problem but they do not seem to receive speech in a typical or normal manner. Children who have expressive language problems have difficulty speaking or using language in a way which gets their meaning across. Sometimes this is because the children have problems with receptive or with inner language. Other times, children can hear, understand, and have ideas and words they want to express, but they still have difficulty expressing themselves.

Speech problems are usually easily recognized. Chidren may be able to understand and use language well, but have problems in their speech. What they are saying is meaningful but the way in which they speak is not clear. The way children pronounce sounds (articulation) is usually noticed by adults.

Some children seem to "baby talk," or substitute one sound for another. For example, three-year-old Robert might say, "My name is Robert and I wike ith cwem and pway time," instead of saying, "My name is Robert and I like ice cream and play time." Robert has not learned to make the sounds /s/ and /r/. Robert substitutes the /w/ sound for the sounds of /r/ and /l/ and the sound /th/ for /s/. Robert will probably outgrow his problem as he learns to listen carefully and imitate others.

Many children do not learn to say all their sounds correctly in the early stages of talking. As they get older, the way they make sounds improves. It is important not to correct faulty speech sounds too severely as this increases the risk of making the child stutter. If a young child can be understood and if her speech seems to get better over time, minor impairments would not be considered a speech problem. However, if the child cannot be understood by others or is concerned about her speech, a referral to a speech therapist should be made.

Children imitate the speech they hear from others. If the child's parents or others in the neighborhood speak with a dialect or an accent, the child will too. If the home language of the child is not English, the child may have difficulty in saying some of the sounds in English, may use the intonation and rhythm patterns of the first language, especially if she is just beginning to learn English. This is not considered a speech or language problem. However, a child with a speech or language problem is likely to have difficulty in both languages.

A third type of speech problem is identified through voice quality. When people get colds, their voices may become very rough and breathy and we say they sound hoarse. Sometimes loud play and screaming a lot can result in a husky and hoarse voice. This is not a significant problem unless the hoarse voice continues over a long period of time or if the person does not have any voice at all and has to whisper or strain when trying to talk. If this happens with a child, it can mean that there is a physical problem. If a young child loses her voice or is unusually hoarse for a period of time, a referral to a physician should be made.

There are a variety of receptive language problems which may cause speech and language impairments in students. Among the most common are those created by hearing loss, conditions due to inner language problems such as echolalia, and an inability to understand the meaning of what is being said, although the actual words or sounds are clearly heard.

Almost everyone notices when a child does not hear at all. Such a child will not jump at loud noises or turn to look when someone yells. Some children do not have a severe or profound loss, but their inability to hear still creates a receptive language problem. Some children suffer from a temporary hearing loss due to colds or allergies. A child with constant running nose should be watched for signs of hearing loss. Sometimes these children are thought to be stubborn because they appear to hear sometimes, but not at other times. Check with parents to find out if the child does have allergy problems which may cause fluid to collect in the child's ears and produce a temporary hearing loss. When a child has a temporary hearing loss, she will miss out on much of what is being taught at the time. Lessons or activities may need to be repeated to be sure the child understands.

Children with a hearing loss that continues over time do not develop language properly. Because they do not hear the sounds others are making when they speak, they are unable to imitate those sounds correctly. They will also miss explanations and directions that will help them develop many other readiness skills. It is therefore important to identify these children as early as possible.

Occasionally a child seems to have a hearing loss, but testing shows good hearing. The child may look up when the other children laugh or when the teacher calls her name. But the child may not answer the questions asked and may have to be shown what to do or may have to hear the same directions over and over before responding. This child may seem to be stubborn, but she has poor understanding, and may have some learning disabilities as well.

Inner language problems may cause a variety of difficulties with receptive language. We cannot see what goes on inside another person's head, how they understand, think, reason, or use language internally. Based on the children's responses, or their expressive language, specialists can make intelligent guesses about inner language. Children who do not receive information will have inner language problems. Other children can hear and say words, but do not process or really understand their meaning.

Echolalia in which children "echo" or repeat everything that is said to them because they do not understand what the words mean, is an example of this type of problem.

In order to communicate by talking, a child must be physically able to make the various sounds and words of language, must have had and understood the words and grammar which is generally understood. The easiest type of expressive language problem to notice is one like Eric's. Eric leaves out many words when he talks and puts words together in an unusual order. "I want to eat now" comes out as "Go eat me now," or Eric might say, "Me go car" instead of "I want to go for a ride in the car." Other children with expressive language problems may have a great deal of difficulty saying words and sentences in a smooth and flowing manner. They may repeat words or sounds or add sounds such as "ummm," "un," or "mmm" to words and sentences. These problems, which seem severe to the listening teacher or parent, may not really be severe unless the adult becomes so concerned that the child becomes worried. This type of repeating, stopping, and starting over is quite typical of a normal stage of language development. Many children go through a stage where they repeat, stop, start over or hesitate until they can think of the word they want to say--they simply have more to say than they know how to say.

Causes

Although speech and language impairments may be easily recognized, their causes may be more difficult to identify. General categories include biologic or organic causes and functional disorders (Gearheart, p. 234).

Biologic causes may include hearing loss or damage to the neurologic system. Brain damage associated with cerebral palsy or some types of mental retardation cause permanent impairment; other speech and language impairment caused by stroke or head injury may improve over time. Brain damage may affect the language center or may limit necessary muscular control, and may be caused by deprivation of oxygen to the fetus, drugs taken by the mother during pregnancy, maternal-fetal blood incompatability, and birth trauma, as well as by stroke or a severe blow to the head. Other biologic causes of speech and language impairment may relate to physical deformities of the muscles and organs used to produce speech.

Functional disorders, although making up the majority of problems requiring special education services, cannot be traced to an identified biologic cause. Poor speech models or encouragement for inappropriate speech patterns may cause speech and language impairments which fit into this category.

Teaching Strategies

Once a child has been identified as having a speech and/or language problem, there are many things which can be done to promote speech and language development. In order to help children learn to understnad, learn to talk, and learn to act appropriately in a school program, it is necessary to use appropriate speech and language as models for the students, and to plan and present specific activities.

When planning activities for speech and language impaired children, keep in mind that it is important for them to learn words that are useful, and that will help them get along a little better in the world. This means that they need to learn the names of actions and objects in everyday use. They need to learn words like "potty," "water," "eat," and "chair," before they learn "radio," "dive," and "fly." Encourage the children's efforts to talk even if the meaning is not clear or if it is not said very well. Repeat words correctly but do not try to make children say them correctly. Don't use baby talk. Remember, you are a model for children, and they will imitate you.

Also remember that it is easier to teach concrete and observable actions and objectives, like "eat," "drink," "push," "dog," "milk," "water," than abstract notions such as "pretty," "helpful," "larger," etc. It also helps the children learn if you use the other senses, especially the senses of sight and movement.

Children with speech and language problems may also have coordination problems, or problems understanding what touches them. They may not like physical contact unless they expect it or start it themselves. Don't be offended by this. These children may not understand what they are feeling and may find touch uncomfortable.

All children and especially children with speech and language problems may become upset at unexpected situations. They need structure, routine, and consistency; they need to know when to expect meals and playtime; they need to know where they should sit and what the daily routine will include. Limit choices and distractions. Children with speech and language problems are often confused when they try to pay attention to two things at once, or when they have to decide between too many choices.

It is important that children with speech and language impairments feel good about themselves. They should be helped to find what they can do well: color, kick a ball, clean the erasers, pass out juice, etc., and should be given many chances to do these things. Brag about them, give them praise, and help them learn how to find things they can do and like to do without forcing them to practice and drill on things that they are unable to accomplish.

HANDOUT

Specific Teaching Tips

1. Consider the difficulty of the words before teaching: concrete and observable actions and objects like "eat," "drink," "push," "dog," "milk," "water," are easier to learn than abstract notions like "pretty," "helpful," "larger."

2. Be sure to use objects, pictures, gestures, or other visual clues with all isntructions you give to a child. Repeat your instructions and rephrase them if they are not understood.

3. Teach for understanding first. Don't try to make children talk or repeat until they understand. This will make children not want to talk when they might not have much to say in the first place.

4. Try to have the child look at you when you are talking. Many children with speech and language problems cannot pay attention to two things at the same time.

5. Use lots of repetition: tell them, show them, let them practice, and tell them again.

6. Listen to and watch their responses to see whether they understand what you are saying.

7. Remember to encourage any attempts made by a child to talk even if the meaning is not clear or if it is not said very well.

8. Use correct sounds and words: do not use baby talk, incomplete sentences, etc.

9. Use everyday occurrences to teach words: when serving snacks teaching things like, "Hold out your hand," "Eat it," "Juice," "Milk," "Give everybody a cup."

10. Use your own physical activities and body movements and those of the children to teach: body parts (back, leg, nose, hand); body actions (sit-ups, turn around, jump, run, walk); movements of toys which children can manipulate (role it, push it, pull it, catch it).

11. Remember to avoid unexpected situations. A surprise, even a happy surprise such as a birthday party or a trip to the circus, can be very upsetting.

12. Limit the number of decisions the child must make. For example, give the child a choice of only two things to do rather than saying,

"What do you want to do now?" Having to make too many decisions may confuse or frustrate the child.

13. If the child has tantrums or becomes very upset, take the child to a quiet place and stay with the child while he or she calms down. Spanking or using harsh words may confuse the child and upset the child even more.

COMPETENCY II:

Develop a General Knowledge of Seven Specific Handicapping Conditions

OBJECTIVE 4.0:

To Develop a Knowledge of the Characteristics, Causes and Teaching Strategies for Working with Orthopedic and Health Impaired Children

Competency II: Develop a General Knowledge of Seven Specific Handicapping Conditions.

Objective 4.0	Content	Activities	Time	Pre/Post Questions
To develop a knowledge of the characteristics, causes and teaching strategies for working with orthopedic and health impaired children	I. Introduction A. Definitions B. Prevalence II. Specific Conditions A. Major orthopedic and neurologic impairments 1. Cerebral Palsy 2. Muscular Dystrophy 3. Spina Bifida 4. Osteogenesis Imperfecta 5. Spinal Cord Injury 6. Legg-calve-perthes 7. Juvenile Rheumatoid Arthritis B. Other health impairments 1. Epilepsy 2. Juvenile Diabetes Mellitus 3. Hemophilia 4. Sickle Cell Anemia 5. Cystic Fibrosis III. Conclusions	Film: DIFFERENT APPROACHES or other film which focuses on abilities rather than disabilities caused by orthopedic and health impairments	30"	Students with ______ make up the largest number of physically disabled children needing special education services. a. muscular dystrophy b. spinal cord injury c. cerebral palsy d. spina bifida
		Handout: PHYSICALLY DISABLED STUDENTS	5"	
		Mini lecture: THE ORTHOPEDICALLY OR HEALTH IMPAIRED STUDENT	10"	Braces are mechanical aids worn for a variety of reasons. Which of the following is not a reason for wearing braces? a. prevent deformities b. prevent further injury c. limit motion at weak joints d. improve muscle function
		Handout: MECHANICAL AIDS AND SPECIAL EQUIPMENT	5"	
		Demonstration: Common mobility and safety aids	10"	
		Question and answer session	10"	Muscular dystrophy affects mainly boys and is characterized by muscular weakness eventually causing death. true/false
		Activity session--Trainees will simulate various handicapping conditions and play a large group game or complete other activity(s)	10"	
		Discussion of implications	10"	
		Videotape, film or case histories of various orthopedic and health impaired students in classroom setting(s)	10"	
		Question and answer session	15"	
		Discussion of implications	15"	

MINI-LECTURE

The Orthopedically and Health Impaired Child

(Major Resource: Gearheart)

According to PL 94-142, the term orthopedically impaired refers to a condition which "adversely affects a child's educational performance." The term includes impairments caused by congenital anomolies (club foot, absence of some member), impairments caused by disease (polomyelitis, bone tuberculosis), and impairments from other causes such as cerebral palsy, amputations, and fractures or burns which cause contractures. Children with "other health impairments" have been described as students with limited strength, vitality or alertness, due to chronic or acute health problems such as heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophelia, epilepsy, lead poisoning, leukemia or diabetes, which adversely affects the child's educational performance. General estimates are that approximately 0.5 percent, or 275,000 school aged children are orthopedically or other health impaired.

Children with a variety of orthopedic and health impairments may be encountered in special education settings. Some will be able to attend regular classes all or part of the day; others will do best when placed in self-contained classrooms where they can receive the specialized educational services which can maximize their learning potential. The information which follows describes some of the characteristics, causes and teaching strategies or educational implications of some of the more common orthopedic and health impairments.

Major Orthopedic and Neurological Impairments

Cerebral palsy--students with cerebral palsy make up the largest number of physically disabled children needing special education services. This disability is the result of damage to or mal-development of the brain before, during or after birth. Usually originating in childhood, it is characterized by varying degrees of impairment of muscle coordination and ability to perform normal motor patterns and skills. Many children with cerebral palsy have other handicapping problems affecting hearing, visual, perceptual, learning, and/or intellectual function. Types of cerebral palsy include:

1. Spasticity--increased muscle tone; overactive, tight muscles.
2. Athetosis--uncontrolled, jerky and irregular movements.
3. Ataxia--lack of coordination related to balance.
4. Mixed--various combinations of the other types.

The degree of involvement and severity of the condition may vary considerably. Children with cerebral palsy may have difficulty in walking, one side of the body may be paralyzed, thus affecting both the arm and leg on the involved side. Speech is often unclear and the child may drool quite heavily.

If placed in a proper educational program, the curriculum for cerebral palsied children may not differ significantly from that of their peers. Often, however, adapted or modified equipment and materials will be needed. Examples of such modification are: pencil holders made of clay, adapted typewriters, page turners, stand-up tables, weights placed on the hands or wrists, and paper holders. Frustrating situations should be avoided with cerebral palsy students; an effort should be made not to introduce tension-producing activities, as these may aggravate existing problems.

Muscular Dystrophy--muscular dystrophy is a progressive, hereditary disease in which muscular fibers degenerate and are replaced by fatty tissue. There are a variety of types of muscular dystrophy, of which there is only one common fatal childhood form, Duchenne. It is characterized by an increasing weakness of the skeletal muscles. Early symptoms of muscular dystrophy include difficulty in running or climbing stairs. Later the child will be confined to a wheelchair. Shoulder and arm weakness appear in the later stages.

During early stages very few educational modifications and adaptations will be necessary. Physical activities are encouraged, but with periods of rest as needed. Eventually, the child will not be able to be served in a school setting and will have to receive homebound instruction. Because physical activity has been shown to alleviate some of the debilitating effects of muscular dystrophy, it is important that the student participate in adaptive physical education classes, while being allowed sufficient opportunity for rest to counter balance fatigue.

Spina bifida--spina bifida is a serious birth defect in which the spinal cord and nerves are not fully enclosed by the bony casings which have failed to close during fetal development. The extent of the disability can vary from little or no impairment to paralysis of the legs and lack of bladder and bowel control. A child with spina bifida may need to wear an apparatus to collect urine and may need some toileting assistance from adults.

Teachers will need to work closely with medical personnel to ensure proper health care. Some children with spina bifida can benefit from regular education with only minor modifications and adaptations.

Osteogenesis Imaperfecta--this condition involves defective development of the bones characterized by brittle bones. Dwarfism and deafness may be secondary associated disabilities.

Although learning may not be affected by this disability, physical problems may be a major concern for school personnel. An early goal is the development of self-protection by the child.

Spinal Cord Injury--spinal cord injuries are most often caused by accidents. The symptoms and severity of the disability will depend on the level of spinal cord injury, not the level of bone injury. In fact, it is possible to "break your back"--injuring the vertebrae--without causing spinal cord injury. The person with a spinal cord injury will be paralyzed below the point of injury. If only the legs are involved, the person is said to be paraplegic; if all four limbs are equally affected, the person is said to be quadraplegic.

Mobility aids, such as canes, braces or wheelchairs may be used by the student with a spinal cord injury. A quadraplegic student may be able to use an electric wheelchair which can be directed with head or arm controls.

Educationally, the student with a spinal cord injury should need little or no modifications, as long as a barrier-free environment is provided. However, psychological supportive personnel may be necessary to help the student cope with her disability.

Legg-calve-perthes--this condition involves the degeneration of the round end of the long thigh bone that fits into the hip socket due to circulatory disturbance. With early detection and medical intervention good to adequate recovery occurs in most instances.

The disease may run in families; however, the actual cause is unknown and no hereditary relationship has been proven. It may occur in children between ages 3-12; however, 80 percent of all cases of legg-perthes disease affect children ages 4-8. The onset of the disease is marked by limping and pain, muscle spasms and difficulty in moving the hip. Bed rest helps to eliminate the latter symptoms, and atrophy of the thigh and shortening of the femur will result from continued weight bearing. The condition does not affect learning but it may cause some psychological problems.

Juvenile Rheumatoid Arthritis--this is the most common form of arthritis in children. It is characterized by stiffness of the joints and usually develops between ages 2 and 5. Some children get relief from symptoms after a period of 10 years. Onset may be slow or sudden; the disease may last only a few weeks or continue throughout the child's life. Since no two cases are exactly alike--arthritis may affect the heart, liver, and spleen, as well as the joints--each will be treated differently. A rule of thumb is that the child with arthritis should be treated as normally as possible. These children will need freedom to move around and should not sit for long periods of time. If hands are affected, alternative methods for class work may need to be utilized, such as tape recorder or special pens or paper.

Other Health Impairments

Epilepsy — a seizure disorder caused by excessive electrical discharges released in some nerve cells of the brain which can result from a variety of brain injuries. When this happens, the brain cannot function properly for a short time and loses control over muscles, consciousness, senses and thoughts. The loss of functions is only temporary. Common types of seizures are:

Grand Mal—most severe form; person loses consciousness, has uncontrolled movement of the body. Breathing may be labored. Seizure may last several minutes. Child may be drowsy afterward.

Petit Mal--mostly short in duration, 5-20 seconds, behavioral changes are slight, short lapse of attention.

If a grand mal seizure occurs, the Epilepsy Foundation of American recommends that teachers (and others) take the following steps (Gearheart, p. 330):

1. Remain calm. Students will assume the same emotional reaction as the teacher. The seizure itself is painless to the child.
2. Do not try to restrain the child. Nothing can be done to stop a seizure once it has begun. It must run its course.
3. Clear the area around the student so that he or she is not injured on hard objects. Try not to interfere with the movements in any way.
4. Do not force anything between the teeth. If the mouth is already open, a soft object such as a handkerchief may be placed between the side teeth.
5. Generally it is not necessary to call a doctor unless the attack is followed by another major seizure or if the seizure lasts more than 10 minutes.
6. When the seizure is over, let the child rest if she needs to.
7. The child's parents and physician should be informed of the seizure.

8. Turn the incident into a learning experience for the entire class.

Explain what a seizure is, that it is not contagious, and that it is nothing to be afraid of. Teach the class understanding--not pity--toward the child so that the classmates will continue to accept her as "one of the gang."

Epilepsy presents few classroom problems. Teachers should be aware of medication taken by the child and should report any seizures to medical personnel. Frequent petit mal seizures may make attending to learning tasks difficul, but these are usually controlled with medication.

Juvenile Diabetes Mellitus--a metabolic disorder caused by the body's inability to burn sugars and starches, due to an inability of the pancreas to produce a sufficient amount of insulin. Symptoms of diabetes include unusually frequent urination, abnormal thirst, extreme hunger, changes in weight (rapid weight loss), drowsiness, general weakness, possible visual disturbances and skin infections such as boils or itching.

Classroom personnel need to be aware of signs of too much or too little insulin in the diabetic student. Too much insulin signs include headache, nausea, vomiting, shallow breathing and/or cold, moist skin; treatment is to give orange juice, candy, sugar cube. Too little insulin signs include fatigue, drinking large amounts of water, frequent need to urinate, excessive hunger, excessive breathing and/or warm, dry skin; treatment is to give insulin.

Hemophilia--a blood disorder, genetically based and occurring primarily in boys. It is characterized by excessive bleeding, externally and internally due to cuts, scratches, or bumps. The clotting mechanism necessary to stop bleeding is missing in these children. Hemophilia does not affect the child's ability to learn. Absences from school which will disrupt the child's education and helping the youngster develop responsibility for protecting himself will be the education concerns.

Sickle Cell Anemia--a hereditary blood disorder more prevalent among, but is not limited to, the black population. Hemoglobin in the red blood cells is distorted into a sickle shape which does not pass through blood vessels. The lack of blood supply to tissues causes severe pains, swelling of the joints, fatigue and high fever. Potential damage to tissues may occur causing degeneration of joints and related orthopedic problems. Although the ability to learn is not affected, frequent absences may affect academic performance.

Cystic Fibrosis--a hereditary disorder found primarily in the Caucasian population. It is characterized by chronic lung disease and pancreatic deficiency. Major problems are a dry cough, bronchial obstruction by normal secretions, and susceptibility to infections. Affected persons may have a life expectancy into young adulthood. Cystic fibrosis produces breathing difficulties, fatigue, poor digestion and muscle atrophy. Cystic fibrosis is often first detected by the salty taste of the skin when a mother kisses her child. Academic learning should not be affected. Strenuous physical activity may need to be limited. Psychological implications will be an important factor.

It is important to remember that many of the students placed in special educational settings will be multiply handicapped. That is, any one of the conditions or impairments just described may be complicated by mental or emotional handicaps. Or, a child may suffer from a variety of orthopedic or health impairments. Careful attention should be given to all of the factors which may affect classroom performance.

Equal attention should be given to the proper use and care of any mobility, safety or personal health aids which the student may have. The child's parents or guardian or the school nurse or physical therapist will be happy to answer specific questions which may arise concerning these items.

Overall, one of the most important considerations in the educational programming for the child with orthopedic or health impairments is to provide an environment which allows the student to reach his full potential. The student will need to be helped to accept himself and to make the most of his abilities. Attitudes, on the part of the student himself or his classmates may present an even greater handicapping condition than the child's actual impairment.

HANDOUT

Physically Disabled Students

Major Orthopedic and Neurological Impairments

1. Cerebral Palsy--Students with cerebral palsy make up the largest number of physically disabled children needing special education services. This disability is the result of damage to or mal-development of the brain before, during or after birth. It is characterized by varying degrees of impairment of muscle coordination and ability to perform normal motor patterns and skills. Many children with cerebral palsy have other handicapping problems such as hearing, visual, perceptual, learning, and intellectual function. Types of cerebral palsy include:

   1. Spasticity (increased muscle tone; overactive, tight muscles)
   2. Athetosis (uncontrolled, jerky and irregular movements)
   3. Ataxia (lack of coordiantion related to balance)
   4. Mixed (various combinations of the other types)

The degree of involvement and severity of the condition may vary considerably.

Educational Implications: If placed in proper educational program, the curriculum may not differ significantly from their peers. Often there will be adapted or modified equipment and materials. Examples of such modifications are: pencil holders made of clay, adapted typewriters, page turners, stand-up tables, weights placed on the hands or wrists, and paper holders.

2. Muscular Dystrophy--There is only one common fatal childhood form, Duchenne. It is characterized by an increasing weakness of the skeletal muscles. Early symptoms include difficulty in running or climbing stairs. Later the child will be confined to a wheelchair. Shoulder and arm weakness appear in the later stages.

Educational Implications: During early stages very few modifications and adaptations will be necessary. Physical activities are encouraged, but with periods of rest as needed. Eventually, the child will not be able to be served in a school setting and will have to receive homebound instruction.

3. Spina Bifida--It is caused by a birth defect in which there is damage to the spinal cord and nerve roots. The extent of disability varies considerably.

Educational Implications: Teachers will need to work closely with medical personnel to ensure proper health care. Some children with Spina Bifida can benefit from regular education with only minor modifications and adaptations.

4. Osteogenesis Imperfecta--This condition involves defective development of the bones characterized by brittle bones. Dwarfism and deafness may be secondary associated disabilities.

Educational Implications: Although learning may not be affected by this disability, physical problems may be a major concern for school personnel. An early goal is the development of self-protection by the child.

5. Spinal Cord Injury--Accidents are the most common causes of this disability. The extent of disability varies.

Educational Implications: Psychological supportive personnel may be necessary. For more involved injuries adaptive aids may be required.

6. Legg-Calve-Perthes--This condition involves the round end of the long thigh bone that fits into the hip socket. With early detection and medical intervention, good to adequate recovery occurs in most instances.

Educational Implications: The condition does not affect learning, but it may cause some
psychological problems.

7. Juvenile Rheumatoid Arthritis--It is characterized by stiffness of the joints and usually develops between ages 2 and 5. Some children get relief from symptoms after a period of 10 years.

Educational Implications: Children will need freedom to move around and should not sit for long periods of time. If hands are affected, alternative methods for class work may need to be utilized, i.e., tape recorder.

Other Health Impairments

1. Epilepsy--It is a seizure disorder caused by excessive electrical discharges released in some nerve cells of the brain. When this happens, the brain cannot function properly for a short time and loses control over muscles, consciousness, senses and thoughts. The loss of functions is only temporary. Common types of seizures are:

1) Grand Mal--most severe form; person loses consciousness, has uncontrolled movement of the body

2) Petit Mal--short in duration, 5-20 seconds; behavioral changes are slight--short lapse of attention

Educational Implications: Present few classroom problems. Teachers should be aware of medication taken by child and should report any seizures to medical personnel.

2. Juvenile Diabetes Nellitus--A metabolic disorder caused by the body's inability to burn sugars and starches.

Educational Implications: Classroom personnel need to be aware of signs of too much or too little insulin. Too much insulin signs include headache, nausea, vomiting, shallow breathing and/or cold, moist skin; treatment is to give orange juice, candy, sugar cube. Too little insulin signs include fatigue, drinking large amounts of water, frequent need to urinate, excessive hunger, excessive breathing and/or warm, dry skin; treatment is to give insulin.

3. Cancer--Prognosis depends upon early diagnosis and treatment.

Educational Implications: Child may need rest and learn to deal with the potential terminal nature of his illness.

4. Cardiac Condition--Few modifications may need to be made; most will be concerned with physician's directions regarding physical activity.

5. Hemophilia--Blood disorder that is genetically based occurring primarily in boys. It is characterized by excessive bleeding, externally and internally due to cuts, scratches, bumps, etc.

Educational Implications: Absences from school which will disrupt child's education and helping youngster develop responsibility for protecting himself will be the educational concerns.

6. Sicke Cell Anemia--A hereditary blood disorder more prevalent among, but not limited to, the black population. Hemoglobin in the red blood cells in distorted into a sicke shape which does not pass through blood vessels. The lack of bood supply to tissues causes severe pains, swelling of joints, fatigue, and high fever. Potential damage to tissues may occur causing degeneration of joints and related orthopedic problems.

Educational Implications: Frequent absences may affect academic performance.

7. Cystic Fibrosis--A terminal hereditary disorder found primarily in the Caucasian population. It is cheracterized by chronic lung disease and pancreatic deficiency. Major problems are a dry cough, bronchian obstruction by normal secretions, and susceptibility to infections. Affected persons may have a life expectancy into young adulthood.

Educational Implications: Academic learning should not be affected. Strenuous physical activity may need to be limited. Psychological implications will be an important factor.

Adapted from:

Gerhart, B. R. and Weishahn, N. W. The Handicapped Child in the Regular Classroom. St. Louis: C. V. Mosby Co., 1976. pp. 75-87.

Haring, N G. (Ed.) Behavior of Exceptional Children. Columbus, Ohio: Charles E. Merrill Publishing Co., 1978. pp. 354-364.

Meyen, L. Exceptional Children and Youth: Introduction. Denver, Colorado: Love Publishing Co., 1978. pp. 362-369.

HANDOUT

Mechanical Aids and Special Equipment

Being able to sit, stand, walk, and use one's hands to explore the world are the basic skills on which every child's social, emotional, and cognitive development are based. Since children with physical handicaps often need help to sit, stand, walk and use their hands, it is important to help them manage these skills before encouraging them to strengthen the other developmental skills.

Every activity we participate in has a motor component to it. Even reading a book or listening to a record requires that we use our muscles to balance while we sit in the chair, hold our heads up, or turn the page. By helping physically handicapped children be able to take an active part and to have confidence in the motor component of an activity, we will be making it easier for them to give more attention and energy to the other learning aspects of the activity. Mechanical aids, special equipment and knowing how to help children position their body for maximum use are ways to help them achieve physical activity.

In many instances it is best to allow handicapped children to learn an activity without special aids or mechanical assistance. However, when they end up having to pay more attention to balance or position than the learning activity itself, mechanical assistance should be used.

The needs of each handicapped youngster varies widely depending on the child's special condition and how severely it affects physical ability.

The child's mechanical assistance requirements, as well as how the assistance is used, will also vary widely.

Physical and occupational therapists are the specialists who will be able to guide and assist you in the best selection and use of equipment or special positioning for each child.

At first you may find it time-consuming to learn about and use mechanical aids, special equipment, and positioning. You may feel you can help the child accomplish activities faster without them. Remember, however, that an important goal in the use of adaptive equipment is to free children from dependence on others for their every need. The efforts you put into learning how to easily and quickly use adaptive equipment will pay off in increased independence for the child—and you!

There are many types of adaptive equipment used by physically handicapped children. Some are used for mobility to get around the home, classroom, playground, and community.

HANDOUT

Mobility Aids

Crutches and Canes

Children who can walk if they have a little support often use one or two canes.

Canes should have solid rubber grip tips on the ends to keep them from sliding on the floor. Proper length of the cane is important. Children can usually walk best when their elbows are 35 degrees from being straight when they stand holding the canes.

Crutches are used when the child needs more support. If crutches are too long they may damage the nerves in the child's arms. You should be able to slide three fingers between the top of the crutch and the child's underarm when he is standing straight with the crutches in front of and out to the side of the feet. The child's elbow should have a 35 degree angle.

Do not let the child hang on the tops of the crutches. The child should carry his weight on the hands, not the underarms. Doing this can also damage arm nerves.

Other kinds of crutches that are used are called forearm crutches. The metal cuff fits below the elbow. The elbow is bent to 35 degrees. The hand rests on the support bar.

There are many different ways to walk with crutches and canes. Ask the child's physical therapist to make sure they are being used correctly and that they fit right.

Walkers

Walkers are used when a child needs maximum support to balance in walking. The walker should always be ahead of the child. The child's elbows should be bent at 35 degrees. When going over a door jam or onto carpet, the child should lift up the front end of the walker to prevent falling.

Baby walkers should not be used for any physically handicapped child unless the child's physical or occupational therapist recommends it. Baby walkers often teach handicapped children wrong movement patterns that will later make it more difficult for them to become physically independent.

Wheelchairs

There are a wide variety of wheelchairs and wheelchair attachments to meet the individual needs of each child. For a wheelchair to be totally and easily functional, it must fit the child correctly and have those attachments that are designed for a child with his specific disabilities. One wheelchair cannot meet the needs of all children. An occupational and/or physical therapist should be consulted before a wheelchair is ordered for a child. Time should then be scheduled for the therapist to instruct the child and family in its correct and safe use in the home, school and community.

Wheelchairs that fit correctly have the following:

- Seat belts that are used at all times
- Foot rests that allow the child's heels to rest on them with the knee bent at least to 90 degrees
- A seat depth that allows the child's knees to bend 90 degrees and does not hit the back of the knees
- A seat width that is not so wide that the child cannot reach the wheels with both hands

Safety points to remember when using a wheelchair are:

- Lock the chair whenever the child is going to get in or out of it.
- If the child cannot propel the wheelchair alone, lock the chair at all times the child is unattended.
- Require that the child wear the seat belt at all times.
- Always push the chair at walking speed to prevent loss of control.
- When going down a hill or ramp, turn the chair around and back down to prevent dumping the child out by accident.
- When going up a step, turn the chair around backward, tip the chair way back and pull up the step on the back wheels.
- When going down a step, face the chair frontwards, tip the chair way back and go down the step on the back wheel.
- Always seek help if you are not sure you can handle it safely yourself.

Scooter Board

Some children are not ready for canes, crutches, walkers, or wheelchairs but would benefit by a means of safe mobility in the home or classroom. Other children, although they have mobility by other means, still benefit from prone progression as a means of strengthening their head, arm, and trunk control. For these children scooter boards are appropriate and fun. They can be made inexpensively out of readily available equipment.

The length and width of the scooterboard will depend on the child's individual disability and needs. They can be constructed out of plywood or pressed wood, padded with foam and covered with vinyl fabric. Four ball bearing (not wheel) casters are screwed in each corner. A tie may be placed around the child's trunk for security if necessary.

Safety Aids

Helmets

Children who fall frequently, who cannot reach out with their hands to break their fall, who cannot hold their head up to avoid hitting it, or who have seizures which result in falls often need to wear helmets to prevent serious injury during physical activity.

Helmets can be homemade out of fabric and foam, or can be football helmets, or be specially designed for handicapped children. The child's feelings about wearing a helmet and the kind of falls will determine what kind of helmet he needs. The child's physician and occupational or physical therapists should help you make this decision.

Safety Restrainers

A variety of harnesses exist to assist children who lack head or trunk control when sitting in their wheelchairs. A physical or occupational therapist should assist you with their selection and use.

Braces

Braces are mechnical devices made of metal bars and leather cuffs and straps. They are designed to:

- Prevent deformities
- Correctly position a part of the body
- Prevent further injury
- Provide support and limit motion at weak joints

Braces do not improve a child's muscle function but support and position the limb for better use of the existing muscle function.

Some braces only control the ankle joint and are called short leg braces. Long leg braces control the ankle and the knee. Long leg braces with a pelvic (hip) band control the ankle, knee, and hip.

Braces must fit correctly. This means the joint where the brace bends at the hip, knee, and ankle should be at the same level as where the child's hip, knee, and ankle bend. The cuffs and straps should not be so tight or so loose that the child develops pressure sores or is pinched by them when standing.

A physical therapist can check to see if a child's braces are fitting properly. They can also assist you in the easiest and fastest way to put braces on and take them off.

Artificial Limbs

Artificial limbs, or prothesis, are worn by children who are missing an arm or leg, hand or foot from a birth defect or injury. They are substitutes for the lost part and enable the child to function more normally.

Children who have artificial limbs are often seen by an occupational therapist if they are missing an arm or hand and a physical therapist if they are missing a foot or leg. The therapist will help the child learn to use the prosthesis most effectively.

Children who have recently received an artificial limb will need to gradually increase the length of time they wear it to prevent the skin from developing blisters. Once the skin has toughened, it is important that the child wear and use the artificial limb all day (unless otherwise directed) in order to learn to use it effectively and to accept the device as part of the body.

Children will experience some discomfort as they learn to use an artificial limb. If it is excessive or if they develop a blister on their stump, be sure to inform the doctor or therapist. The artificial limb should not be worn as long as a sore exists on the stump.

Posture Aids

Because of abnormal muscle tone, handicapped children will often need special help positioning to improve their motor function and to prevent deformity. What they are positioned on and how they are positioned is determined by their disability and individual needs. A physical or occupational therapist will be able to advise you if and how a child needs special positioning.

Some of the positioning aids are wedges and bolsters, floor chair, and prone standers. Wheelchairs can also be adapted to correct and provide good posture.

Wedges and bolsters help children develop head and trunk control while freeing their arms and hands for play.

Floor chairs help children to sit erect on the floor with legs extended straight in front. It assists with sitting balance while helping to keep the back and leg muscles from getting tight. A floor tray can be placed in front of the child for feeding or table activities.

Prone standers are used to assist children to support in standing when they are unable to otherwise. It helps encourage the normal function of the digestive and eliminative systems. It encourages the development of good joint structure and alignment. It helps keep the muscles and bones strong.

Feeding Aids

Children who have difficulties controlling their arms and hands will benefit from the use of special bowls, cups, glasses and spoons. There are a variety of utensils available. A physical or occupational therapist will be able to help you determine the aids which best suit each child and where to obtain them.

Plates with raised edges help the children who have difficulty scooping food on a spoon.

Non-slip placemats can be used under dishes when the child's lack of motor control frequently results in the plates sliding off the table.

Spoons with lowered bowls or rotated bowls help the child who has difficulty scooping or getting the spoon in his mouth. Plastic coated spoons are also more comfortable for the child who frequently bangs the spoon in his mouth, teeth or gums while eating.

Training cups with two handles and a spout give children better control of drinking.

If a child has difficulty picking up the cup, he can lean over to drink from a stationary glass with a lid and plastic straw.

Glasses for children who can't tip their heads back can easily be made by cutting a half circle out of the opposite side of a plastic glass. Children can then drink to the bottom of the glass without bumping their noses on the edge of the glass.

The best assistance to children with feeding difficulties is a table and chair at the proper height. Feet should touch the floor or support surface. Arm rests should be provided, if necessary, for balance. The tray or table top should be at elbow height.

These are only a few of the many assistive devices available to physically handicapped children. If you see a need for a child to have adaptive equipment or are having difficulty with self-help or play skills for a child, consult an occupational or physical therapist to help you problem solve and obtain the special equipment.

COMPETENCY II:

Develop a General Knowledge of Seven Specific Handicapping Conditions

OBJECTIVE 5.0:

To Develop an Awareness of the General Characteristics, Major Causes and Educational Strategies for Working with Emotionally Handicapped Children

Competency II: Develop a General Knowledge of Seven Specific Handicapping Conditions.

Objective 5.0	Content	Activities	Time	Pre/Post Questions
To develop an awareness of the general characteristics, major causes and educational strategies for working with emotionally handicapped children	I. Introduction A. Definitions B. Prevalence	Mini lecture: THE EMOTIONALLY HANDICAPPED CHILD	10"	Children who are unresponsive to their environment, display ritualistic or compulsive behavior and have difficulty in using language for communication are often diagnosed as: a. speech and language impaired b. autistic c. hearing-impaired d. dependent-fearful
	II. Characteristics III. Causes IV. Teaching Strategies	Handouts: GENERAL CHARACTERISTICS OF EMOTIONALLY IMPAIRED CHILDREN AND SUGGESTIONS FOR THE DEPENDENT-FEARFUL CHILD	5"	
		Panel Presentation: CHARACTERISTICS OF THE EMOTIONALLY HANDICAPPED CHILD (include autistic, dependent fearful, manipulator, aggressive, withdrawn, hyperactive) Presenters could include mental health worker, psychiatrist, special educator, parent	20"	Aggression in children is usually a. a reaction to frustration b. a hereditary behavior c. a learned behavior d. due to child abuse
		Question and answer session	20"	Emotional impairment may result in learning difficulties. true/false
		Handout: CHARACTERISTICS OF EMOTIONALLY HANDICAPPED CHILDREN	5"	
		Videotape or case studies--common behaviors of emotionally handicapped children (4-5 examples)	10"	
		Brainstorming: Ways to handle or respond to behaviors described	15"	

MINI-LECTURE

The Emotionally Handicapped Child

(Major Resource: Gearheart . . .)

Several terms are used interchangeably to refer to children with emotional problems. Commonly heard terminology includes behavior disordered, psychologically disordered, emotionally handicapped, emotionally disturbed and socially handicapped. For the remainder of this presentation the term "emotionally handicapped" will be used to describe those children who have difficulty coping with their environment.

While there are a variety of definitions which have been put forth to describe the emotionally handicapped child, consensus has not been reached in the educational or mental health communities. This, coupled with the lack of acceptable, standardized tools to assess mentally handicapping conditions, makes diagnosis difficult. Every individual responds to the environment--to everyday stress, events and disappointments differently--and it is difficult to understand why the apparently same situation will cause one child to grow and flourish, and another to withdraw, become lethargic and to lose touch with reality.

Because of the lack of standardized definitions and diagnosis, it is difficult to estimate the number of school aged children who are emotionally handicapped. Estimates range from 0.05 to 81.5 percent of the school population, but realistically it would appear that about 2-3 percent, or 1,100,000-1,650,000 children between the ages of 5-18 are emotionally handicapped to an extent which requires special educational services. Most of the children considered to be emotionally handicapped will, with treatment, lead normal adult lives.

Characteristics

Children with emotional problems are known by their behavioral excesses and deficiencies. For example, an emotionally disturbed child may show excessive antisocial behavior (such as kicking and hitting), or he may show a deficiency in social-interpersonal behavior (such as being extremely withdrawn). These extreme behaviors may be demonstrated in a variety of settings, including home, school, and community. Emotionally handicapped children make themselves known through their actions and words, which usually rouse hostile and frustrated responses from family members, school officials, policy and other authority figures.

At some time or another emotionally healthy children will exhibit many of the behaviors exhibited by emotionally handicapped children, such as hitting, crying, or retreating to be alone. However, the key factors which separate the emotionally healthy from the emotionally disturbed are: severity, duration, frequency, and appropriateness of the behavior. Severity refers to the intensity of the behavior or the extreme to which it is carried; duration refers to the length of time the behavior lasts; frequency refers to how often the behavior occurs; and appropriateness refers to whether the behavior is appropriate for the stimulus, time, and setting.

Keeping in mind that children who are not mentally handicapped may exhibit one or several of the characteristics below, the following, rather lengthy listing, attempts to itemize characteristics appearing in various state guidelines for placement of children in programs for the emotionally handicapped: (Gearheart, p. 293)

- avoids contact with others
- avoids eye contact
- behavior that is ritualistic
- chronically disobedient
- covert or overt hostility
- disorganized in routine tasks or spatial orientation
- displays temper tantrums
- disturbances of sleep or eating habits
- emotional isolation
- exaggerated or bizarre mannerisms
- few or no friends
- frequent and/or persistent verbalizations about suicide
- frequent illnesses
- frequent unexplained crying
- frustration level is low
- hyperactivity
- inability to complete tasks
- inappropriate verbalizations and noises
- inattentive
- inconsistent in academic performance
- inconsistent in friendships
- lethargic
- out of touch with reality
- physically withdrawn from touch
- physically aggressive to others or property
- rapid and severe changes of moods
- refuses responsibility for actions
- requires constant reassurance
- repetitive behavior
- seeks attention
- self-mutilating
- self-stimulating
- severe reactions to change in usual schedule

- sexual deviations
- truant
- unexplainable "accidents"
- unexplained academic decline
- unmotivated
- unreasonable and/or unexplained fears
- verbally aggressive
- verbally disruptive

Causes

A variety of theories have been put forth to explain why emotional handicaps occur. These include biophysical, psychodynamic, behavioral, sociologic and ecologic theories. No one really knows exactly what causes a social and emotional handicap in a child. However, there are some identifiable factors which can contribute to social and emotional difficulties. An infant's earliest experiences are of great importance to emotional well-being. Experiences which can have harmful effects on later personality development include: severe maternal deprivation; distorted parental attitudes; parents with abnormal personality patterns; poor parent-child relationship; and frequent changes in environment.

Medical science has discovered that biological factors such as disease, trauma and brain damage can cause deviant behavior. There is evidence that the risk of certain mental illnesses such as schizophrenia and psychosis increases when a person has a close relative with these conditions. Biochemical imbalances such as toxins, vitamin or mineral deficiencies and malnutrition have been linked to emotional handicaps and changes in diet, and megavitamin therapy have sometimes been successful in eliciting behavioral changes. There is some belief that the behaviors displayed by hyperactive children may be caused by an immature nervous system or chemical imbalance. However, the search for medical explanations and cures remains mostly a matter of speculation.

Teaching Strategies

Children with emotional handicaps in school settings usually benefit when there is some consistency between techniques used in the home and the school. Teachers will need to be aware of any medication being taken by the student, and will want to cooperate with a student's psychiatrist to whatever extent possible. Positive reinforcement in a structured environment has often been effective in helping emotionally handicapped students to reach their potential.

Several practical teaching strategies have been suggested by Haring and Phillips (1962) for use in the classroom:

1. Get the child down to work immediately upon entrance into the activity area thereby precluding a period of excitement, "horse-play," or daydreaming.

2. Have a schedule sheet or notebook for each child in which the actual activities and the times devoted to each are indicated.

3. Let every child know that she has a schedule to work from daily.

4. Expect the child to offer protests now and then, but be prepared to meet objections.

5. Be equally ready to offer support and reward for activities successfully done.

6. Never "attack" the child as a person; center corrections on actual tasks.

7. Evaluate the child often enough to keep fully abreast of her progress.

8. Assume that the child's knowledge of her progress must come from you and from standard and formal evaluations of her progress, as from her own self knowledge.

9. Realize that as the child progresses, she will also grow in the social-emotional areas because she is operating as an integrated unit.

10. Think of emotion as a by-product of successful functioning; improve emotional responses by setting up tasks in clear, firm, consistent ways so that success is likely because it is based on realistic goals.

HANDOUT

General Characteristics of Emotionally Handicapped Children

There are numerous definitions of emotional handicaps and various listings of characteristics. However, Bower (1969) listed characteristics of emotionally handicapped children in terms of their visibility to the classroom teacher. According to Bower there are five basic warning signals that can alert one to the fact that some social and emotional handicap may exist. They are:

1. The child who can't seem to learn in school: Some children have difficulty learning in school even though their intelligence and physical development seen normal. Some have difficulty because their social and emotional troubles prevent them from being able to gain from learning experiences. Others are undiagnosed learning disabled children who are struggling under years of frustration and misunderstanding. The emotional problems in these learning disabled are not the cause of their learning problems, but rather emotional difficulties have resulted from continued failure and frustration.

2. The child who is unable to form or maintain satisfactory interpersonal relationships with peers, teachers, and others: Maintaining satisfactory relationships requires more than just getting along. It focuses on the ability to build warm and sympathetic bonds. It implies enjoyment in working and playing constructively with others and by oneself. However, the child who is emotionally handicapped may, by his/her very actions, repel others and eliminate any chance for a good relationship to grow.

3. The child who acts inappropriately to normal directions and situations: If the teacher hands back an incorrect paper to be done over, reactions may vary considerably among several children. The aggressive child may refuse to follow routine, directions, or rules unless she chooses to do so. The withdrawn child may seem to conform to directions until she can escape through physical hiding (under a table) or into fantasy through daydreaming. The child who has no self-confidence may see everything as a threat and tend to follow a programmed set of behaviors whether appropriate or not. The "con-artist" may appear to agree to demands but behind the teacher's back may be doing exactly what she wants to do.

4. The child who generally feels unhappy or depressed: Depression and unhappiness are typical of children who express feelings of

discontent all the time. Nothing or nobody can satisfy or please them. These children seldom smile. They seem to enjoy wallowing in their misery.

5. The child who constantly develops illnesses, pains, or unexplained fears: The tendency to develop illness and fears is especially apt to be found in withdrawn children and/or children who lack self-confidence. It provides them with a socially acceptable excuse to get out of situations that are threatening to them.

HANDOUT

Suggestions for the Dependent-Fearful Child and Strategies for Working with the Emotionally Handicapped Child

1. Prepare the children for change.
2. Deal with the children's fears and try to eliminate worry and anxiety.
3. Provide support in new and possibly frightening situations.
4. Use praise.
5. Get the child's attention.
6. Present instructions simply.
7. Plan an extremely structured program.
8. Structure tasks for errorless learning.
9. Teach a learning activity several times.
10. Teach sequentially (task analysis).
11. Use positive reinforcement.
12. Avoid punishment (especially with autistic children).
13. Change activities often.
14. Follow disliked activities with liked activities.
15. Teach communication and language skills.
16. Teach appropriate social behavior.
17. Teach according to specific strengths and weaknesses.
18. Provide plenty of elbow space or room for child who:
    - is hyperactive
    - is easily distracted
    - rarely finishes what is started
    - is in constant motion
    - has short attention span
    - has difficulty concentrating on tasks for long periods of time
    - dislikes change.
19. Establish eye contact with child before starting work.

HANDOUT

Characteristics of Emotionally Handicapped Children

The Autistic Child

Autism cannot be clearly defined. Autism is a behavior and communication disorder which is baffling and poorly understood. It is a severe form of withdrawal from the child's environment.

Common Characteristic Behavior

1. The most obvious and disturbing characteristic of autistic children is their unresponsiveness to the environment. They avoid eye contact, appear aloof and distant, and seem to treat people in the say way they treat objects. They deliberately withdraw from human contact, do not play with other children, and often show no need for affection. They want attention, but don't know how to get it. They often do not seem to know or care who their parents are.

2. Their behavior shows an inappropriate and inconsistent response to the environment. They may scream when a light is turned on. They often show indifference to loud sounds or pain. They may be unable to play with a toy.

3. They seem unable to use language for communication. Some autistic children do not speak at all and others speak in unrecognizable sounds. Still others use recognizable speech but not in any meaningful fashion. They may simply repeat meaninglessly whatever they hear.

4. They may display ritualistic, compulsive, or bizarre motor and verbal behaviors. These children often throw violent screaming tantrums. They may bite or scratch themselves or bang their heads. They may spend most of the day rocking back and forth, flapping their arms, waving their fingers in front of the eyes, or making strange noises.

5. These children are obsessively resistant to change. They often will Angrily reject adult attempts to interrupt their play or move them. They may demand to eat at the same place every meal or want others to say the same thing in the same way.

Many theories have evolved in an attempt to explain the causes and reasons for this severe behavioral disability. Because autistic children lack responsiveness, many of these children have been mislabled as retarded, deaf, or visually impaired.

The Dependent-Fearful Child

Dependent and fearful children are very often insecure, worried, and afraid. As a result, they miss out on a lot of growing and learning experiences. The world is a very scary place for these children.

The overdependent child has a tendency to depend on others for more help, attention, and affection than is usual for the child's age and level of development. These children are insecure and lack self-confidence. These feelings may be the result of domination or rejection by the parents, rejection by the cultural or social group, or rejection by their peers. Overdependent children may depend on anyone who is available to give them the attention and comfort they so desperately need. They can exhibit many fears of new people or new situations. These fears must be treated with respect.

Dependent behavior shows itself most commonly in seeking help when help is not really needed, seeking constant attention and approval from others, and being open to any suggestions whether they are good or bad. Dependent and fearful children may cry very easily. Frequently they are the classroom whiners. It seems easier for them to watch their peers at play than to join in.

The Manipulator

There is a small category of children who exhibit socially acceptable behaviors such as politeness, friendliness, and conformity. However, their behavior is an "act." They are smart enough to know that gross unacceptable behavior will get them into trouble, so they pretend to be "nice" when necessary to cover up their true intentions. Another name for these children is "con artist." Their goal is life is to manipulate people and situations to their own personal advantage. They are the children who are skilled at playing people against each other. They play parents against each other and the school against the home. Adults are usually taken in by the "con artist" whereas other children can see through the act. "Con artists" are so clever that they represent the most difficult kind of emotional problem to pinpoint. There is some social acceptance in our society for "anti-heroes"--people who pull off imaginative but illegal schemes to get ahead. Unfortunately, this acceptance can reinforce the "con artist."

The Aggressive Child

Aggression is an actual or threatened act of hostility. It may be a form of displaced anger, arising when the child cannot express his/her anger directly toward the person or object that caused it. Generally, it is a reaction to frustration which results in the child attacking the person or object that stands in the way of doing what she wants to do. The more frustrated a child is, the more aggressive she is likely to become. Aggressiveness may be expressed in many ways:

1. provoked physical aggression--child becomes involved in a physical attack after being provoked by someone or something.

2. outbursts of aggression--an uncontrolled temper tantrum.

3. verbal aggression--a child verbally attacks another with threats, scolding or lies.

4. indirect aggression--an attack through another person or object, as when a child talks about another person, breaks things belonging to a person she would like to attack directly, or incites someone else to attack.

The Withdrawn Child

The biggest problem with withdrawn children is that they don't know how to build relationships with other people. It is difficult to identify these children because they are so quiet and undemanding. The teacher may at first see a withdrawn child as one who doesn't get into arguments with other children or make any particular demands on the teacher's time. Close observation of this child will show that she is having a hard time relating to people. Some signs of this difficulty are:

1. little or no reaction to other children or adults
2. poor eye contact
3. more interest in objects than in people
4. repeating a phrase over and over with little meaning
5. barely communicating with words she uses
6. not speaking at all
7. rocking back and forth
8. staring at things for long periods of time
9. using toys in strange ways (turning a block over and over in the hands instead of using it to build)
10. putting things like play dough, paste, or paper into the mouth to suck or chew.

These behaviors are the child's ways of seeking comfort and good feelings because she has such a very hard time being friendly and relating to others. It is less risk-taking to relate to objects; they are constant and unchanging.

Self-harming, repetitive habits are signs of more serious difficulty. Continuous scratching, skin picking, lip biting, head banging, and hair pulling are signs of very serious emotional disabilities. Children with these behaviors are particularly tense and nervous and are badly in need of warmth and protection from others, and yet their very behaviors repel other children and adults.

Usually withdrawn children are lonely and frightened about being with others. They do not trust others and because they can't make friends, they end up feeling like strangers or outsiders.

Hyperactive Child

Hyperactive children have a heightened awareness of the things around them. They exhibit their hyperactivity in many ways:

- are easily distracted by sound or movement
- experience difficulty concentrating on any task for long periods of time
- experience difficulty focusing on one stimulus; this includes visual, auditory, and sensory perception
- are in constant motion
- rarely finish what they start
- impulsive (act first and think later).

COMPETENCY II:

Develop a General Knowledge of Seven Specific Handicapping Conditions

OBJECTIVE 6.0:

To Develop a Knowledge of the Characteristics, Causes, and Strategies for Teaching Children with Learning Disabilities

Competency II: Develop a General Knowledge of Seven Specific Handicapping Conditions.

Objective 6.0	Content	Activities	Time	Pre/Post Questions
To develop a knowledge of the characteristics, causes and strategies for teaching children with learning disabilities	I. Introduction A. Definition B. Prevalence	Mini lecture: THE LEARNING DISABLED CHILD	10"	Children identified as learning disabled: a. often are mentally retarded b. are usually emotionally disturbed c. have normal or above normal intelligence d. often have hearing impairments
	II. Characteristics	Handout: SPECIFIC ACTIVITIES	5"	
	III. Causes	Guest Speaker: From local Association for Children with Learning Disabilities (ACLD)	10"	
	IV. Teaching Strategies	Question and Answer Session	15"	Identification of learning disabilities in children usually occurs: a. when the child enters school b. at birth c. in preschool or day care centers d. in the home
		Simulation Activities	5"	
		Videotape or case histories of students with learning disabilities	5"	Chidren with identified learning disabilities often also have difficulty with perceptual-motor coordination. true/false
		Discussion of ways to work with examples or cases in school setting, brainstorming	15"	
		Small group activities (rotate centers) that can be used with LD children. a. perceptual motor activities i.e., memory game, matching items; following instructions texture activities b. eye hand coordiantion activities, i.e., locating letters on swinging ball; balloon games c. developing motor skills, i.e., animal walks, obstacle course	10"	
		Discussion of specific teaching strategies--led by learning disabilities teacher, if possible	15"	

MINI-LECTURE

The Learning Disabled Child

Learning is a continual process of acquiring new skills, thoughts, and ideas. This process begins at birth and continues throughout life. Young children learn in both structured and unstructured settings. They learn through adult instruction, but they also learn through play and social interaction, through movement of all kinds, and through handling and exploring objects and toys. Learning takes place constantly as children interact with the environment.

Sometimes children do not learn because of problems or behaviors that interfere with learning. They may learn things very slowly and with great difficulty. They may have problems in listening, thinking, talking, moving, and seeing and hearing things as they really are. They are often slow in being able to sit, crawl, walk, talk, and feed themselves. This is called developmental lag, which means that there is a delay in reaching these developmental milestones.

Children with learning problems often become frustrated, anxious, and angry. They often act and react to events in their surroundings in ways that are not appropriate for children of this age.

In many cases, difficulty in learning can be traced to a specific handicapping condition such as visual or hearing impairment or emotional handicaps. However, for other children problems in reading, writing or math seem to exist without apparent cause; these children are said to have learning disabilities. As defined by PL 94-142:

> "specific learning disability means a disorder in one or/more of the basic psychological processes involved in understanding or using language, spoken, or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia and developmental aphasis. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, or mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage."

Overall, authorities estimate that 2-3 percent of the school aged population suffers from learning disabilities. This means that some 1,650,000 to 2,200,000 students are receiving some form of special education service each year because of difficulty in learning. Because learning disabilities can often be "overcome" as a child matures or with educational intervention, this figure represents a higher percentage of elementary than secondary students. In most cases, the diagnosis of "learning disabilities" is made only after a child has demonstrated difficulty in one or more academic areas, although she may show some of the behaviors associated with learning disabilities before that time.

Characteristics

Children are individuals. They are naturally different from each other, and each child's background is unique. Just because a child is different does not mean that he or she has a learning problem. It is important to realize that all differences are not due to problems in learning. They can be due to many influences upon the child. Be aware of language and cultural differences. Students whose home language is not English, may have trouble understanding instructions and may be delayed in English language development. This is not a sign of a learning problem. Be aware of basic differences in personality. Some children are active and curious, eager to play and explore new things; other children are simply less curious or active. Some children are naturally more talkative and outgoing; others are quieter. Be aware of background differences. Some children have been taken many places, done a variety of things, and have had the opportunity to learn, talk and explore. If a student has not had the chance to explore and learn new things, he or she may not be curious or interested in many different things.

When children's differences are not due to language, cultural, or other identifiable factors they may be due to learning problems. Early recognition of these disabilities is important in order to see that the child receives help before falling behind others, or developing behavioral or emotional problems.

There are many indications of learning disabilities which may be identified by teachers, parents and others working in close contact with children. Difficulties in a variety of developmental areas may provide clues to the presence of learning disabilities. These include:

Personal/Social Development

- conflict with other children
- poor body image and self-concept
- immature social behavior
- fear of failure

Cognitive Development

- lag in development in one or more areas of intellectual functioning
- discrepancy between potential intellectual development and actual achievement

Language and Speech Development

- delayed language development
- need for repeated instructions
- inability to follow sequence of two or more directions
- echoes or "parrots" language

Motor Development

- preservation (repeating same motor movement without changing pattern)
- overactive
- difficulty with gross motor skills
- inability to cross midline of body
- distractable
- difficulty in distinguishing right from left
- handedness not established
- difficulty in fine motor skills
- fearful of heights
- inability to follow motor directions

Perceptual-Motor Development

- visual perceptual problems
- auditory perception problems
- tactually defensive
- perceptual motor integration problems

Causes

The exact causes of learning disabilities are not known. They can be the result of environmental conditions, heredity, or a combination of the two. Learning problems can result from factors influencing the child before birth, during birth, or at some time after birth. Some learning problems can be very severe, but more often they are mild.

There is evidence that for some children, difficulties in learning caused by hyperactivity may be caused or accentuated by sensitivities or allergies to certain dyes, preservatives and other additives in food. Other learning disabilities involve apparent inabilities to process and utilize visual, auditory or motor information, although there are not specifically identifiable visual, hearing, or motor impairments.

Teaching Strategies

Specific strategies used in the education of students with learning disabilities will vary, depending on the nature and extent of the problem. Some children will need assistance in only one area, and may best be served in a regular classroom with added assistance from the resource room teacher, others, whose disabilities or behavioral problems are more extensive may do best in a self-contained classroom in which learning can be highly structured and distractions kept to a minimum. Even in a self-contained classroom, the types of teaching strategies utilized will differ from child to child.

Overall, learning disabled children will benefit from activities which emphasize personal and social skills, cognitive or intellectual skills, language and speech skills, motor skills and perceptual motor skills. Some specific strategies which have proven successful include (Farley, to be published 1982):

- using a variety of methods to reinforce learning behavior—including praise, poems and stories, role simulations, drama, music and art activities, movies, slides, discussions and field trips.
- using concrete visual, auditory and tactile instructional cues.
- rotating active and passive activities to prevent boredom and fatigue.
- varying the length of activities according to attention spans, and limiting work periods to maximize success.
- avoiding drastic change in instructional content; relating one activity to the next.
- reducing distractions; using small groups and clear, quiet work areas.
- remembering that reinforcement should be immediate, consistent and appropriate.
- using printed materials that are dark, clear and adequately spaced—dark print on white background is best.

- using more concrete than abstract ideas.
- speaking softly so the child will listen.
- being calm--try not to show anger, irritation or rejection.
- using physical contact (e.g., a hand on a shoulder) to reduce hyperactivity.
- being firm--make the child perform the tasks he is capable of doing.
- using simple commands or directions.

HANDOUT

Specific Activities

In selecting activities for children with learning problems, choose those that fit each child's specific needs and abilities. Choose activities which build up all areas of the child's development. Use the child's strengths to help build up weak areas. The following lists some specific activities you can use in each of the five areas of development.

Personal/Social Skills

The personal and social development of children with learning problems depends a great deal upon being accepted by both adults and other children.

Build up a child's self-esteem:

- Give the child a job to do that is important, such as pouring juice.
- Help the child get positive attention; let the child tell about something exciting, such as ponyride.
- Give the child lots of warm feelings that come from praise, recognition, and smiles.
- Take time each day to really talk to the child about what he or she has been doing and is feeling.

Encourage the child to develop social skills:

- Encourage group work at tables, on the floor, and outside.
- Encourage children to play together. Children learn from each other.
- Encourage the buddy system: holding hands on field trips.
- Give a reward when the child interacts positively with other children.
- Use modeling to teach appropriate social behavior, such as eating or using a napkin.

- Teach and have the child practice social behavior in the appropriate setting.

- Help the child become independent by encouraging toilet training, self-feeding, dressing, and shoe-tying. These are necessary self-help skills.

Cognitive or Intellectual Skills

These are skills like remembering, classifying, sorting, and solving problems. They help children understand and organize their world.

You can teach these skills with matching and identifying by using:

- Color concept games: Match colors, sort objects with same or different colors; classify objects according to those that belong together or match.

- Number concept games: Teach number concepts using shapes in Formboards, pegs in pegboard, one-to-one matching.

- Word games: Teach position in space by teaching concepts such as over/under, in/out, up/down, high/low.

- Matching, sorting or classifying games: Teach recognition of things that are alike and that are different, using shapes, objects, toys.

- Matching games and activities.

- Sequencing pictures.

- Action games: Act out new words and ideas.

Language and Speech Skills

There are many activities that encourage the development of language skills:

- The child's expression of personal needs.
- The child's response to language. They might be gestures, signs, or words. (They are all forms of language.)
- Word-action association as child learns movement and action words.
- Following basic commands such as, "Please sit down."
- Meaningful language experiences. As the child begins to

communicate, the child will want more and more language as a means of communication.

- Show and tell.
- Storytelling.
- Role-playing: Act out a story or activity (playing house).
- Dramatic play: Act out the child's feelings, fears or frustrations.
- Moving with the child: Hopping with you, the child learns the word "hop."

Motor Skills

These can be divided into gross motor (large muscle) and fine motor (small muscle) skills.

Gross motor skills can be developed and enhanced through the use of planned motor activities. These activities can help the child coordinate seeking, hearing, moving, and balancing. They encourage tactile (touching) and kinesthetic (movement) experiences of the whole body.

- Rolling exercises.
- Crawling exercises.
- Acting out a snake.
- Kneeling exercises: walking on knees.
- Walking like a seal (flat on tummy, walk using elbows).
- Puppy dog run: on hands and knees.
- Hopping, skipping games.
- Tunnel activities: climbing through different boxes and containers.
- Obstacle course games: climbing through, over, under, between objects.
- Jumping games: over or down from objects.
- Balance beam or walking board: Put tape on floor and walk forward and then backward.
- Climbing games.
- Throwing, kicking balls.
- Musical games with movements of whole body.
- Outdoor play equipment: tricycles, scooter boards.
- Imitative movement exercises: During outdoor play, adult can lead children in single file--walk, then run, skip, hop, jump.
- Games like "Simon Says" and "Going on a Bear Hunt."

Fine motor (small muscles) skills can be developed and encouraged through the use of exercises and play activities. These activities help children learn to coordinate all their senses. The senses involved in motor skills include visual, auditory, and kinesthetic. Children learn how to sequence and pattern their movements and how to plan the movements of their muscles. Some fine motor activities you might want to use in your center are the following:

- Puzzles.
- Manipulating objects such as pegboard, formboard, flannel boards and pictures that the child uses.
- Tracing objects.
- Cutting pictures out of paper.
- Coloring.
- Pasting.
- Stacking games, using cups, boxes.
- Painting with paint brushes, sponges, or vegetable prints.
- Playing with Play-Doh or clay.
- Finger painting.
- Stringing beads.
- Reproducing designs or shapes.

Perceptual Motor Skills

The following activities focus on the development of the various senses and the coordination of senses and movement or perceptual motor integration. Perceptual motor training consists of the training of the senses--visual, auditory, tactual, smelling and tasting, and movement. Children with learning problems often have difficulty understanding what they see and hear. You can help them learn to use what they see and hear.

There are many activities that will teach visual (seeking) skills.

- Track moving objects with their eyes: Use ball on string and let it swing.
- Learn names of real people and objects.
- Recognize differences between two people or two objects.
- Match objects that are alike.
- Match pictures of objects that are alike.
- Tell which objects or things are different.
- Form board: Match forms and shapes.
- Puzzles.
- Copy figures, shapes, designs.
- Memory games like magic box filled with objects: Child sees several objects, which all go back in box, and tells you names and characteristics of objects.

There are activities you can use to help develop auditory (hearing skills:

- Learn awareness of sounds.
- Learn names of sounds.

- Listen to sounds on tape.
- Recognize familiar sounds.
- Identify sounds that are the same and sounds that are different.
- Listen to and play musical instruments: These can be made by children, such as drums, tambourines, sticks, triangles.
- Follow verbal instructions.
- Learn differences between sounds in music: high, low, loud, soft.

Many activities can be used to encourage and develop tactual skills. (Tactual refers to information received from touching things with parts of the body.)

- Walk with bare feet on various textures: sand, grass, concrete.
- Feel various textures with hands: velvet, satin, fur.
- Feely box: box filled with various objects; children reach in with hands and must select object to match one on table which they can see.
- Finger painting with feet: paint picture; make prints of children's feet on paper.
- Texture rubs: Rub children's arms, faces with various textures such as satin, velvet, and feathers.
- Free play using water or sand.
- Rubbing lotion or powder on children's bodies.

Smelling and tasting skills can be developed by the use of stimulating activities:

- Have the children smell and taste various fruits and foods, such as lemon, lime, garlic, chocolate.

- Have the children smell different scents; cotton balls can be dipped in perfume, vinegar, or other liquids.

- Have children taste foods that have opposite taste:
  — sweet or sour
  -- sweet or bitter
  — salty or hot

- Have the children taste foods with different textures: smooth or crunchy.

- Have the children taste foods that look alike but taste different:
  — salt and sugar
  — cornstarch and flour

Perceptual motor integration is achieved when a child understands what is perceived through the senses and can coordinate movements to act upon the environment. Perceptual-motor integration activities are movement activities which also involve the use of the senses. Some of the activities which encourage perceptual motor integration are:

- Balance beam activities.
- Rocking or rolling activities.
- Obstacle course games.
- Whole body movement games.

COMPETENCY II:

Develop a General Knowledge of Seven Handicapping Conditions

OBJECTIVE 7.0:

To Develop a Knowledge of the Characteristics, Causes and Teaching Strategies for Working with Visually Handicapped Children

Competency II: Develop a General Knowledge of Seven Specific Handicapping Conditions.

Objective 7.0	Content	Activities	Time	Pre/Post Questions
To develop a knowledge of the characteristics, causes and teaching strategies for working with visually handicapped children	I. Introduction A. Prevalence B. Definition	Handout: CONDITIONS THAT CAUSE VISUAL PROBLEMS	5"	Persons with visual acuity of ______ in their better eye are legally blind. a. 20/70 b. 20/100 c. 20/200 d. 20/400
	II. Characteristics	Mini lecture: THE VISUALLY IMPAIRED CHILD	10"	
	III. Causes IV. Teaching Strategies A. Development of other senses B. Orientation and travel training	Handout: GENERAL TIPS FOR WORKING WITH VISUALLY IMPAIRED CHILDREN	5"	Cataracts are growths which cloud the eye's lens and can be caused by a child's mother having contracted German Measles during pregnancy true/false
		Simulation exercise: Play game or complete problem blindfolded 2) pouring items (Trainees could divide into two groups and do activities simultaneously)	10"	An involuntary, rapid movement of the eyeball is called. a. amblyopia b. strabismus c. myopia d. nystagmus
		Discussion of simulation exercise	10"	
		Demonstration: Orientation and mobility training by mobility specialist	5"	Most visually impaired children have residual vision. true/false
		Group orientation and mobility exercises led by mobility specialist or see Camp Fire p. 8	10"	
		Videotape or case histories of visually impaired children	5"	
		Discussion of educational implications; brainstorming teaching strategies	15"	

MINI-LECTURE

The Visually Impaired Child

Although severe visual disabilities occur in only a small percentage of the population, the number of persons in the general population who require corrective eyeglasses is high. Very few children of school age will have a visual disability that is severe enough to identify them as blind. The most commonly cited figure is 0.1 percent. Most children with visual problems have from minimal to moderate impairment; and are usually able to function independently. They quickly learn to use what sight they have. If children are not encouraged to use their sight to its fullest capacity, the vision they do have will deteriorate and they will see less.

The National Society for the Prevention of Blindness Fact Book (1966. p. 10) defines visually impaired as follows:

> "Blindness is generally defined in the United States as visual acuity for distance vision of 20/200 or less in the better eye, with acuity of more than 20/20 if the widest diameter of field of vision subtend an angle no greater than 20 degrees.
>
> The partially sighted are defined as persons with visual acuity greater than 20/200 but not greater than 20/70 in the better eye with correction."

Characteristics

School personnel play an important role in identifying children who may have eye difficulties which require professional attention. Therefore, it is important to be aware of the symptoms that may indicate vision difficulty. The following list of symptoms was compiled by the American Optometric Association:

Appearance of the Eyes

- eyes crossed--turning in or out at any time
- reddened eyes
- watering eyes
- encrusted eyes
- frequent styes

Behavior Indications of Possible Vision Difficulty

- body rigidity while looking at distant objects
- thrusting head forward or backward while looking at distant objects

- avoiding close work
- short attention span
- daydreaming
- turning of head so as to use one eye only
- tilting head to one side
- placing head close to book or desk when reading or writing
- frowning or scowling while reading or writing
- excessive blinking
- frequent rubbing of eyes
- closing or covering one eye
- dislike for tasks requiring sustained visual concentration
- nervousness, irritability, or restlessness after maintaining visual concentration
- unusual fatigue after completing a visual task
- losing palce while reading
- using finger to keep place while reading
- saying the words aloud or lip reading
- moving head rather than eyes while reading
- difficulty in remembering what is read
- persistent reversals after the second grade
- confusion of similar words
- poor eye-hand coordination
- unusual awkwardness

Complaints Associated with Using the Eyes

- headaches
- nausea
- dizziness
- burning or itching of eyes
- blurring of vision at any time

Other conditions which may indicate visual impairments are pupils of uneven size, eyes that move excessively, and drooping eyelids.

Causes

Visual impairments can be related to a number of identifiable causes (Gearheart, p. 150-152). The most common are refractive errors such as nearsightedness (myopia), farsightedness (hyperopia) and astigmatism, which results in blurred and confusing visual images. These three conditions can become serious visual impairments if left uncorrected, but usually respond well to corrective eye glasses or contact lenses.

Another cause of visual impairment is lens abnormalities such as cataracts or dislocation of the lens due to head trauma. Children may also be born with or develop choroid or retinal defects which result in weak and/or disorganized sensations being sent to the brain. Damage to the optic nerve will also prevent visual messages from accurately reaching the brain.

Problems with muscular control may also cause visual impairments. Amblyopia (lazy eye), nystagmus (involuntary, rapid movement of the eye) and strabismus (crossed eyes) are examples of muscular control problems affecting vision.

Visual impairment may also be hereditary or congenital resulting from disease or general developmental defects or may be caused by a blow to the head, infections, inflammation, poisons, or other causes such as too much oxygen given to a premature baby at birth.

Teaching Strategies

Since sight is used extensively in most daily living situations and especially in learning situations, it is important that the visually impaired child develop all of his senses to their fullest potential. School personnel will need to provide experiences for the development of the auditory, tactile, olfactory, gustatory, visual and kinesthetic senses.

The visually impaired child must develop her sense of hearing as keenly as possible in order to succeed in moving about safely and efficiently in the environment. In addition, many visually impaired students will need to depend on their hearing for "reading" talking books and cassette books. Knowing how to use one's hearing is not automatic; it is learned. Auditory training is a must for the visually impaired child. There are four important factors involved in learning the correct use of sound. The child must become aware that sounds are all around him, inside him, and that he can make sounds himself. There are many sounds occurring that the child probably is not noticing.

The child needs to be able to identify the sounds that are heard. She should want to explore and identify an unfamiliar sound and not pass up any opportunity to do so. The visually impaired child needs to know where the sound is coming from. Location of sound is often difficult because sound sources originate at different height, bounce off or are blocked by an object, move from place to place, and start and stop intermittently. Finally, the child needs to be able to pick out important sounds from a background of other sounds. She must also be able to detect differences in loudness, tone, rhythm, and all the other variations of sound.

For the visually impaired child the sense of touch is a primary way of learning about the shape, size, position, texture, and weight of objects. The child's ability to identify objects depends heavily on well developed tactile skills. If the child is totally blind, good tactile skills are crucial for the developmental of pre-braille skills. Activities which help the child to identify different textures, walking surfaces, fabrics, shapes, sizes; compare sizes of objects; and to recognize similarities and differences between objects and change in temperature and atmospheric conditions should be included in the daily educational program.

Developing the sense of smell can bring a wealth of useful information to the visually impaired child. Many objects have identifying odors and often the child can identify his environment by the surrounding smells. Activities should be geared to help the child become aware of, identify, localize, and discriminate between various smells. At the same time, developing the sense of taste can increase the visually impaired child's ability to gain information. All infants go through a stage of putting objects into their mouths. This is a normal process of learning about the environment. For children with normal vision this mode of learning is soon replaced by using the other senses. However, the visually impaired child may need to continue to put objects into the mouth in order to gain a better understanding of them. Activities offered should help the child become aware of, identify, and discriminate between various tastes and textures.

Most visually impaired children have residual vision. As is true with all the other senses, visual skills are not automatic; they are learned. When the eye is functioning normally, children can learn many visual skills by themselves. However, when vision is impaired, a child must often be taught how to use the vision she has and to understand what she is able to see. It is especially important for a visually impaired child to be taught to use whatever amount of remaining vision she has. The following suggestions should be considered before attempting to teach specific visual development activities:

- a visually impaired child should be encouraged to visually investigate objects in and outside the classroom in order to broaden his visual experience.

- provide real life objects for the child to explore and understand before introducing models of actual things. For example, present a real dog before presenting a model (stuffed animal) of a dog. Last of all present a picture of a dog.

- it is necessary to develop language skills so that the child can understand and recognize specific visual cues involving shape, size, position, likeness, difference, etc. Having the words to talk about what she sees will help the child clarify visual impressions and will help adults assist the child more effectively.

- when first beginning work with a visually impaired child, allow short periods of time (5-15 minutes) for visual stimulation activities. The length of time can be gradually increased as the visual activities become less tiring for the child.

- initially all materials should be large enough for the child to see easily and quickly. Size can be reduced gradually as long as the child continues to be successful at the visual activities.

Kinesthetics refers to knowing where a body part is in relation to space. Essentially, it is "getting the feel" of a particular movement, or sensing the rightness or wrongness of a movement, i.e., knowing when one's head is tilted to the side. Development of kinesthetic skills is especially important for orientation and travel training. Orientation is the mental process of establishing one's position in relation to all other significant objects in the environment. Travel is physical movement from one place to another. Orientation and travel training includ two separate but interdependent areas of learning. Orientation and travel training techniques are so closely related that in order to be an efficient traveler a child must be competent in both areas.

Many legally blind persons learn to use a white cane to assist in safe and independent travel. Training with the white cane cannot take place until the child acquires a thorough grasp of basic orientation techniques. These orientation techniques are simply the skills needed to use the remaining senses in order to establish a position in relation to other objects within the immediate environment.

The skills that a child needs to acquire before cane travel can begin are called pre-cane skills. These skills are very critical to later success as an independent traveler. Pre-cane skills for the visually impaired child can and should be taught in the regular classroom before formal travel training can begin. Formal travel training should ideally be done by a person called an Orientation and Mobility Specialist.

Lessons in pre-cane skills may start before the child reaches school age and should be considered an important part of her daily curriculum. The ultimate goal of orientation and travel training is to enable the child to enter any environment, familiar or unfamiliar, and to function safely, efficiently, gracefully, and independently by utilizing a combination of skills.

Both orientation and travel skills require good kinesthetic development, i.e., knowing where a particular body part is in relation to space. The activities suggested for teaching orientation and travel training are, for the most part, based upon development of the kinesthetic sense. In order for a child to experience many movements, it may be necessary for the teacher to first put the child physically through the activity. The child may need to feel the movements taking place before she can imitate the actions independently. Some tips to remember related to orientation and travel are:

- begin with easy activities and gradually progress to more difficult ones
- be safety conscious but do not restrict the child's curiosity and confidence
- develop confidence and assurance in the child
- avoid rushing through activities
- assist the child in development of motor coordination and balance
- give as much individual attention as possible

HANDOUT

Conditions That Can Cause Visual Problems*

1. Refractive errors--irregularities in the size or shape of the eye that prevent light rays from being brought to a single focus exactly on the retina. These conditions, if not too severe, can usually be corrected with glasses. There are three types of refractive errors:

   a. Myopia or Near Sightedness--the ability to see only close objects clearly; far objects appear fuzzy. In myopia the light rays focus before they reach the retina.

   b. Hyperopia or Far Sightedness--the ability to see only far objects clearly; near objects appear fuzzy. In hyperopia the light rays have not yet focused when they reach the retina.

   c. Astigmatism--irregularly shaped cornea. The normal cornea is shaped like a basketball. In astigmatism the cornea is often shaped like a football. It can occur alone or in combination with myopia or hyperopia.

2. Glaucoma--a condition caused by an accumulation of aqueous fluid in the front part of the eye. The fluid cannot drain away adequately and the pressure inside the eye rises to a point where it causes damage to the nerve fibers. This damage can then lead to loss of sight or blindness. Surgery or prescribed drugs may relieve the condition and thus save the vision. Although this condition occurs most often in older people, it also occurs in children.

3. Cataracts--clouding of the clear material of the lens in the eye. A cataract is not a growth of any sort. The process that takes place when a cataract forms is similar to the change that occurs to an egg that is being cooked. The white of an egg gradually changes from a clear substance to an opaque, white one. When any part of the lens becomes opaque, the person has a cataract.

The most common cause of cataracts is aging. As a person becomes older, the substances in the lens undergo chemical changes. Little by little, the clear substances become cloudy. Diabetes may also produce chemical changes and hasten clouding of the lens.

Some cataracts are congenital; that is, they are present at birth and therefore are still present when the child reaches school. One cause of congenital cataracts is rubella (German measles). If the mother is infected with the rubella virus during the prenatal period, the disease can produce cataract formation in the baby before birth. A blow to the eye or an injury by a sharp object that penetrates the lens can also cause the transparent lens to become opaque.

There is no known way of preventing the beginning of cataract formation. There are also no medicines that can rid an eye of cataracts. It is possible, however, to surgically remove a lens which is no longer clear and therefore has lost its usefulness. After the removal of the natural lens either glasses, contact lenses, or a plastic lens implanted in the eye must be used. If a person has only small cloudy spots within the lens, it is possible to "see around" the cataracts and therefore removal of the lens is not necessary.

4. Strabismus--failure of the two eyes to direct their gaze simultaneously at the same object. Six eye muscles control movement of the eye. If these muscles are not correctly controlled or coordinated, strabismus will result.

5. Amblyopia or Lazy Eye--a condition that occurs when one eye is not used. Amblyopia can occur because of a large difference in acuity between the two eyes or because of a muscle imbalance that causes double vision (a type of strabismus). The child involuntarily stops using one eye. If this process continues for a long time, the brain will forget the unfavored eye. The will lead to dimness of vision or loss of sight in the unused eye. Eventually the condition will become irreversible. If detected in early childhood (before age 7), amblyopia can be corrected by putting a patch over the strong eye until the weaker eye gains strength through continued use.

6. Nystagmus--an involuntary, rapid movement of the eyeball. The involuntary movement is usually from side to side, but may also be up and down, rotary, or mixed. Children with poor visual acuity since birth may have nystagmus. Nystagmus may also be a sign of other diseases such as inner ear disease, multiple sclerosis, brain tumor, or strabismus.

7. Optic Nerve and Pathway Disorders--loss of vision that results from damage to the optic nerve or its pathway. The optic nerve connects the eye to the brain. The specific site of any damage to the optic nerve or its pathway will determine the type of visual loss. Damage to the optic nerve before it reaches a certain point (optic chiasm) will result in loss of vision in one eye. Damage to the optic nerve after it passed the optic chiasm will result in loss of part of the visual field in both eyes.

8. Inflammations--non-specific reaction of the eye to injury from any of the following causes:

- a. infection
- b. allergy
- c. trauma (blow to the eye, burns, snow blindness, radiation, paints, gasoline, oil)
- d. drugs

Inflammations have the potential to cause either temporarily or permanently impaired vision. Infections are inflammations caused by disease producing organisms such as bacteria or virus.

Some inflammations and/or infections which can affect the eye are:

1. Conjunctivitis--an inflammation of the covering of the eyeball and lining of the lids. Conjunctivities makes the eyes red, congested, and irritated. A commonly used term for conjunctivitis is pink eye.

2. Uveitis--an inflammation of the lining in the back of the eye. Uveitis can cause serious eye problems if it results in a detached retina.

3. Gonorrhea--If a mother has been infected with gonorrhea, the bacteria can affect her baby during passage through the birth canal. The bacteria can cause damage to the baby's vision. Silver nitrate drops are required by law and put in the eyes of every newborn infant. This destroys the bacteria of the gonorrhea. If a baby is born at home, the parents should make sure that the baby receives silver nitrate drops.

4. Rubella (German measles)--If contracted by the mother during pregnancy, rubella can damage the baby's development and result in visual impairment, hearing impairment, heart disease, or mental retardation.

5. Stye--a localized infection in the tissue of the eyelid which causes a red bump on the lid. The infection may spread to surrounding tissues and cause a discharge.

6. Retrolental Fibroplasis (RLF)--an overgrowth of immature blood vessels from the retina into the fluid behind the lens. This mass of vessels outgrows its capacity to nourish itself and scar tissue develops. Blindness of varying severity results. It occurs in premature infants (most often weighing three pounds or less) who have received high concentrations of oxygen. Occurrence of RLF has decreased in the past 20 years as its cause became known and hospitals altered their treatment of premature babies.

7. Albinism--hereditary loss of color in the eye, skin, hair. The dark colored lining in the eye and the color in the iris help protect the eye from receiving too much light. In albinism the protective coloring is lost. Generally visual acuity is reduced. Tinted lenses may relieve discomfort.

8. Defective Color Vision--reduced ability to perceive differences in color, most commonly reds and greens. Complete color blindness is very rare; thus the term "defective color vision" is more appropriate to use. This hereditary condition occurs more in males than in females. A child with defective color vision may have trouble with colored numbers or color coded letters, with using color in art, and with matching similarly colored objects.

Accidents involving sharp objects and falls account for more than 75 percent of all eye injuries. Small children don't understand the dangers of playing with pointed sticks or other sharp objects. It is important for adults to teach young children how to play safely.

Occasionally a small piece of glass, wood, or metal can get into the eye. Rubbing the eye is a natural reaction but should be strongly discouraged. The cornea may become scratched and the result could be permanent scar damage which can cause some vision loss. Rubbing the eye may also cause an inflamation. Usually tears will wash the small object out of the eye. If not, trained help is needed to remove the object.

From: Special Needs of the Young Exceptional Child: Visually Impaired, pp. 32-36.

HANDOUT

General Tips for Working with Visually Impaired Children

Teachers and aides who have worked with the visually impaired have come to learn that visually impaired children miss some very important social skills if they are isolated from their sighted peers. By including a visually impaired child in a regular classroom, the child will grow up sharing the same experiences as sighted schoolmates. In addition, this sharing of experiences is an excellent means of breaking down old prejudices about visually impaired children. It is true that a visually impaired child may need special kinds of help, but this is true of all children from the slowest to the most gifted, either sighted or visually impaired.

The following suggestions may be very helpful in working with a visually impaired child:

1. Make the child feel that she/he belongs to the class. Don't give the child special privileges and don't make exceptions in your rules of discipline.
2. Give the visually impaired child the chance to grow in independence just as you do other children.
3. Give instructions carefully and be clear in your verbal directions since the visually impaired child may not be able to detect your visual cues.
4. Prepare materials to allow maximum color contrast like black on white rather than green on yellow or pink. Avoid the use of ditto materials since they tend to be faded and hazy after the first few copies.
5. Encourage the child to taste, smell, and feel everything possible, not just to look at it.
6. Provide toys and materials that have a variety of textures on the surface like bumps, sandpaper, corduroy, and screens, as well as smooth plastic.
7. Instead of pointing to an object walk over to it and tap or make a noise on the object so the child can hear as well as see the location.
8. Allow the child to write with a thick tip, black, felt pen rather than a pencil.

9. Talk openly and honestly with the child about his/her vision. Do not either exaggerate the impairment or pretend it doesn't exist.

0. Provide materials that make noise like balls with bells inside instead of regular balls and toy animals that make sounds instead of stuffed animals.

11. Remember to focus attention on sounds and smells going on around the child. Occasionally ask questions such as: "What's that sound?" or "What do you smell right now?"

12. When handing the child an object, actually touch his/her hand with the object rather than holding it out somewhere in front.

13. Be consistent in your own perfume or cologne so the child can distinguish you from other teachers by your scent.

14. When teaching a new skill, have the child feel how the skill is done. Have the child put his/her hands on yours and follow along as necessary motions are made.

15. Talk a lot about what is going on around the child, about feelings, events, and situations.

16. Be consistent in placement of classroom furniture and materials. If a change is made, be certain the child is shown the change as well as told about it.

17. Use different textured rugs to announce the approach to important spots such as entrances or exits, bathrooms, sinks, etc. Make sure these rugs are securely fitted to the floor to avoid tripping.

18. Assign the child the first or last cubby hole, chair, drawer, or coat hanger rather than one in the middle of a large group.

19. Enable the child to work and play in a well lighted area that is free from glare. Regular light bulbs are easier on a visually impaired child's eyes than flourescent lighting.

20. Give the child a front seat in the classroom.

From: Special Needs of the Young Excepetional Child: Visually Impaired, pp. 23-24.

HANDOUT

[illegible]

Orientation Development Activities

Orientation involves establishing one's position in relation to all other significant objects in the environment. A visually impaired child must have a good concept of space as it relates to his/her own body before learning about other spaces.

Body Parts

1. Provide activities that help the child identify his/her own body parts.

   a. Play finger games like "Thumbkin" and sing songs like "Head and Shoulders, Knees and Toes."

   b. Have the child lie on a large sheet of paper. Trace around the child as she/he names the body parts being traced. Help the child cut out the form. Have him/her add other body parts like eyes, fingers, etc., and identify them.

2. Provide activities that help the child identify various body parts on someone else.

   a. Play games like "Find my nose," "Where's my leg?", "Find dolly's hand," etc.

   b. Have the child assemble body part puzzles.

3. Provide activities that help the child learn the function of various body parts.

   a. I see with my-------, I smell with my-------, I talk with my-------.

   b. What do hands do? What do feet do?

Body Movement

1. Provide activities that help the child develop an accurate concept of his/her body's capabilities and limitations. Encourage freedom of movement in the child's immediate environment.

2. Practice movements and explore various ways that the body can move. Fingers can be closed, opened, spread apart, brought together, etc.

Shoulders can be pulled forward, pulled back, raised up and lowered to normal position.

Space Relationships

These activities require the use of many directions, locations, and movement words; under, over, up, bend, twist, left, right, parallel, perpendicular. Start with the easier words and progress to the more complicated ones.

1. Provide activities that help the child understand the relationship of one body part to another.

   a. Demonstrate activities for the child to imitate; nose to wrist, hands to hips, chin to chest, etc.

   b. Play "Simon Says;" "Simon says put your hands on top of your head," etc.

2. Provide activities that help the child understand the relationship of objects to his/her body.

   a. Have the child follow directions such as: "walk under the ladder," "climb over the bridge," "put the pencil in your hand," "put the pencil on top of the desk," etc.

   b. Set up an obstacle course. Have the child follow the course while you describe what she/he is doing. "You are going down the slide," etc.

3. Provide activities that help the child understand the relationship of one object to another.

   a. Have the child follow directions such as: "place the glass above the spoon," "place the plate on the table," "put the book in the shelf," etc.

   b. Have the child play with various construction toys while you describe the object to object relationships: "That big one fits well under the small one," etc.

4. Provide activities that help the child understand directional concepts; left, right, backward, forward, up, down, etc.

   a. Show the child which side of his/her own body is the right and which is the left. Have the child practice finding: right foot, left ear, right eye, etc.

b. Present clothing that comes in pairs; gloves, shoes, etc. Help the child find the left one and right one.

Body Expression

Many of the body expressions that are often considered automatic such as waving a greeting, nodding yes or no, opening the eyes and mouth wide in surprise, etc., are actually learned by visual observation. The visually impaired child may need to be taught these behaviors specifically.

1. Have the child practice following a person's voice with his/her head and eyes.

2. Create short plays or skits in which body expressions that are new to the child can be taught and used appropriately.

Posture Development

Visually impaired children often do not observe correct posture and thus need to be taught this skill specifically. Many of their posture problems are due to fear of movement and uncertainty of their surroundings. Offering encouragement to the child is the primary step in developing good posture.

1. Walking posture--have the child practice walking with a book or bean bag on his/her head. Have the child practice walking on a balance beam. Use a wall to help the child line up with correct walking posture.

2. Holding the head in a correct upright position—visually impaired children tend to hold their head forward and down. Play soldier and practice marching with the head held high.

3. Standing posture--use a wall to demonstrate correct standing posture.

4. Sitting posture--Have the child feel the chair to determine if his/her position is correct. Using a chair with arms may make this easier.

Balance

It is often difficult for visually impaired children to develop ease in movement and balance. Therefore, it is essential to teach a variety of gross motor activities. Practice and play games that involve crawling, walking, running, rolling, falling, skipping, sliding, jumping, and hopping. A tumbling mat can be used to offer protection for the child.

Room Orientation

The visually impaired child needs to feel comfortable and secure in his/her daily environment. Becoming familiar with classroom surroundings is essential.

1. Familiarize the child with all important facilities and equipment in the room that she/he will use: Light switches, doors, windows, closets, hooks, hangers, chairs, tables, dividers, toys, crayons, puzzles, paper, etc. Don't try to point out everything in the room in one session. This may overwhelm and confuse the child.
2. Starting at the door, have the child cross the room and identify any objects she/he encounters.
3. Have the child make several trips from the doorway to a specific object and return to the door.

From: Special Needs of the Young Exceptional Child: Visually Impaired, pp. 124-127.

HANDOUT

Equipment to Assist Visually Impaired Children

Various kinds of equipment and aids are now available for use by the visually impaired. Some of these devices are relatively inexpensive and readily available while others are more expensive and require special training in order to use them. Commonly used equipment and aids include: low vision magnification aids; optacon; talking calculators; abacus; and typewriters.

Low Vision Magnifying Aids

Low vision magnifying aids are high powered magnifiers which increase the size of printed materials. They can be of several types:

1. High-power additions to eye glasses--These magnifiers can be clipped to eye glasses for reading activities or can be inserted in eye glass frames.

2. Hand-held and stand magnifiers--Hand-held magnifiers are useful for short duration tasks but are difficult for young children to use. They require skills in determining correct distance and angle to be held from the paper in order to benefit from clear magnification. Even if a young child locates that correct distance, it is difficult to maintain without excessive wiggling. Magnifiers mounted on a stand hold the magnifying aid at the required distance and parallel to the page. They are less tiring to use than the hand-held type.

3. Closed Circuit Television--In closed circuit television magnification, a book or visual task is placed in a position under a TV camera. An enlarged printed orange image is viewed on the screen of a TV monitor. Magnification, contrast, and brightness are easily adjustable. There are fewer distortions with electronic magnification such as the closed circuit television than other optical aids.

Optacon

The Optacon (OPtical-to-TActile CONverter) is a reading aid which converts a printed image to a vibrating tactile form which can be felt by a trained blind person. In order to read using the Optacon the blind person moves a miniature camera across a line of print with one hand. The index finger of the other hand is placed on the Optacon's tactile receiver. As the camera is moved across a letter, the image is reproduced on the tactile receiver by miniature vibrating rods. The reading finger feels the enlarged letter as it passes across the tactile receiver.

Using the Optacon reduces the need for depending entirely on braille or auditory reading. Different styles and languages can be read with the Optacon because it reproduces exactly what is printed.

Talking Calculator

Visually impaired children can get extra help in math by using a talking calculator. The hand-held unit has a 24-word vocabulary and announces every key stroke and every step in calculation as it is made. The calculator can add, multiply, subtract, divide and do square root.

Abacus

An abacus is an inexpensive piece of equipment which can assist a visually impaired child with mathematics. Basically, an abacus is a manual computing device consisting of a frame holding parallel rods strung with movable counters (beads).

Typewriter

A regular typewriter can be very helpful in terms of communication for visually impaired persons. It is not unusual for visually impaired children to have poor penmanship due to the inability to clearly see what they are writing. In addition, writing can be very time consuming and frustrating for them. Teaching a visually impaired child to type makes it possible for him/her to complete school assignments in a manner which is easily read by the classroom teacher. Most visually impaired children can be taught beginning typing skills in the lower elementary grades.

From: Special Needs of the Young Exceptional Child: Visually Impaired, pp. 120-121.

APPENDIX A

Supplemental Resources

Supplemental Resources

HANDICAPPING CONDITIONS

General

Books

Early Self-Help Skills: Steps to Independence: A Skills Training Series for Children with Special Needs
Bruce Baker
Intended for parents of children with special needs, the manual provides basic techniques in teaching early level self-help skills, such as eating, grooming, and dressing through behavior modification.

Research Press

Reading in the Psychology of Exceptional Children
Herbert Goldstein
Provides selected reading in these areas: Special Education, Mental Retardation, Learning Disabilities, Autism, Behavior Modification, Mainstreaming, Emotional and Behavioral Disorders, Speech and Hearing, Deaf and Visually Handicapped Education, Dyslexia, Physically Handicapped Education, and Gifted/Talented Education.

Special Learning Corporation 575 pp 1978

Dictionary of Special Education
Orm D. Parashar
Provides technical definitions for multidisciplinary professionals and parents in order to facilitate their communication in the area of special education.

Educational Activities 117 pp 1977

Early Childhood Education for Exceptional Children
June B. Jordan, Alice H. Hayden, et al.
Handbook of ideas and exemplary practices developed out of the First Chance Program, which created demonstration models for public schools and other agencies who need information on how to provide a variety of kinds of help to handicapped children and their families.

Council for Exceptional Children 310 pp 1977

Audiovisuals

FILMSTRIPS

Approaches to Mainstreaming—Teaching the Special Child in the Regular Classroom
Units I and II

A series of training filmstrips that provide information and practical suggestions to help regular classroom teachers meet the needs of the special students in their classrooms. The Unit I series contains the four specific filmstrips: Individual Differences; Characteristics of Children with Special Needs; Organizing Your Classroom; Handling Behavior Problems. Unit II contains Selecting Materials; Adapting Materials; Modifying Your Instructions; and Evaluating Your Instruction.

Teaching Resources Corporation 1976

Creating Instructional Materials for Handicapped Learners

Shows teachers how to create materials for teaching handicapped learners, and guides teachers in selecting, evaluating, adapting, and using commercial materials for educating handicapped children.

National Audiovisual Center filmstrips/cassettes 1974

A Walk in Another Pair of Shoes

This filmstrip, narrated by Tennessee Ernie Ford, explains some of the problems encountered by learning disabilities of children to other children. The emphasis is on how it feels to be a handicapped child and how a normal child can be of assistance to a handicapped child.

CANHC Film Distribution
Sale: consult distributor filmstrip color 18-1/2 min.

A Special Need, A Special Love: Children With Handicaps, Families Who Care

The problems and potential of handicapped children, specifically, the help and support the family requires; how family members can help one another in working with the handicapped child, and the services available for educators, the helping professions, and the community.

Parents' Magazine Films, Inc. filmstrips/cassettes 1976
$200.00

Project Me

A full-service program to provide comprehensive awareness and training for teachers of preschool handicapped children (ages 3-5).

Six modules include cassettes/filmstrips, games, roleplay, and various print material, including actual classroom materials. The six modules are the following:

1. Why Me? awareness, attitude training
2. Assess Me. assessment, classroom testing
3. Place Me. Interdisciplinary and administrative approaches and problems of placement
4. Teach Me. communication and counseling training for teachers
5. Parent Me. communication and counseling training for teachers and parents
6. Accept Me. an advocacy model for student and teachers.

Education Service Center filmstrips/print materials/cassettes
Sale: $260.00

RECORDS

Special Children

An overview of the field of exceptionality and an introduction to the area of special education. Presents the special child as an individual more normal than abnormal in his desire for life and learning.

Media 1972 30 min.

FILMS

Cynthia Dresses Herself

Content is aimed at parents and teachers of handicapped children. It demonstrates learning principles for teaching specific behavior.

Teaching Research Division color 16 mm 10 min.

Evaluation by the School Psychologist

Explains the process of evaluation of a student by a school psychologist. The evaluation procedure is traced from the teacher's referral of a student to the acquisition of the special education help needed by the pupil.

Instructional Media Services 20 min.

Looking At Children

An excellent film that portrays the early signs of health problems and conditions in children as seen by observant teachers. "Looking for Health" booklet is supplementary to this film.

Metropolitan Life Insurance Company color 16 mm 24 min.

Maybe Tomorrow

Shows how and why certain methods are used to help blind, deaf, retarded and crippled children improve their coordiantion, increase self-confidence and achieve their highest potential.

AIM for the Handicapped 26 min.

Nobody Took the Time

Preschool program for disadvantaged children who are ineligible for Head Start or other preschool programs because of developmental problems, such as, brain damage, mental retardation, emotional disturbance or social maladjustment. These children are functionally retarded. Belle Bubnoff, and other staff members demonstrate and discuss activities and problems found in working with these children through social interaction, play, language, feeding, etc. This is a pilot program for young ghetto children having a typical problem. Good for teachers, parents, agencies, administrators.

Dubnoff School for Educational Therapy b/w 16 mm 20 min.

Play Learning Centers for Preschool Handicapped Children

A visual report of a BEH-funded research and demonstration project involving the design, construction, and evaluation of three play learning centers for preschool handicapped children. The play behaviors of children with a variety of developmental needs is shown in each of the innovatively designed play centers.

Division of Educational Resources 30 min.

Emotionally Impaired

Books

Behavior Disorders in Children

Harvey F. Clarizio, George F. McCoy

Evaluates some accepted facts, theories, principles about disturbed children and adolescents; presents vignettes of children with point-by-point summaries to assist students. Also discusses issues associated with normal development.

Thomas Y. Crowell 596 pp 1976

Audiovisuals

FILMS

Aggressive Child

The purpose of this film is to show that serious emotional problems often underlie difficult or puzzling behavior in children. It illustrates how parents' feelings and attitudes influence children's emotional development and behavior, with particular emphasis on the importance of experiences in early infancy on children's growth and emotional life. Play therapy and other modern techniques in psychotherapy, counseling, and special education are illustrated in a variety of ways.

National Association for Mental Health b/w 16 mm 28 min.

Lonely Night

Deals with the mental turmoil of an emotionally unbalanced person, the nature and function of psychiatric treatment, and the quality of parent-child relationships that results in mental well-being. Pictures reactions to loneliness in different people and follows the psychiatric treatment of a young woman who seeks to overcome her fear of loneliness. Identifies simultaneously through a series of family experiences the nature of child care that leads to the development of good mental health.

National Association for Mental Health b/w 16 mm 65 min.

Who Is This Child?

Who is emotionally disturbed? How do we define those who are emotionally disturbed? How do we find that child in the school or home? These questions are investigated in the film by employing techniques of case study. The difficulties of forming a definition for the term "emotionally disturbed" that will be satisfactory in every case, and the problems of constructing a working description by which a child is identified, are further elaborated upon by the discussion panel.

New York State SEIMC b/w 16 mm 30 min.

Learning Disabilities

Audiovisuals

FILMS

Early Recognition of Learning Disabilities

Children who have learning disabilities stand out vividly in daily classroom activities during their early school years, as do their problems. Interviews with parents and teachers emphasize that it is urgent to recognize learning disabilities early and provide extra teaching needed in time to achieve full educational potential.

National Audiovisual Center color 16 mm 30 min.

Teaching the Way They Learn: Remediation of Learning Disabilities
This film has been prepared primarily for teachers of young trainable children. Its purpose is to illustrate a classroom climate and suggest teaching and training techniques which have been found helpful in stimulating maturation, and encouraging the growth of communication skills in mongoloid children at the primary school level.

Harris County Center for the Retarded, Inc. b/w 16mm 27 min.

Books

Behavior Modification of Learning Disabilities
Robert H. Bradfield
Presents the general application of behavior modification in educational and social environments; its use in remediation of learning disabilities; model programs and curriculum.

Academic Therapy 172 pp 1977

Developmental and Learning Disabilities
John H. Meir
Contains extensive explanation of normal development and learning as well as disabilities in development and learning. Offers in-depth report of prevention, detention, intervention, and evaluation procedures.

University Park Press 444 pp 1976

Other Health Impairments

Audiovisuals

VIDEOCASSETTES

Tim Talks About Epilepsy
An explanation of what happens in the brain and body to cause seizures. A comparison of epilepsy with such other bodily misfunctions as hearing and eyesight problems, allergies, etc. Emphasizes use of medicine to control seizures.

Farrago Information Systems 8 min.

FILMS

Chronic Disorders

Discusses the special problems confronting the child with a chronic disorder such as hemophilia. Explains various types of chronic disorders and points out how social and emotional growth is complicated by a chronic illness. Shows how educational training is provided for some children with chronic disorders.

Indiana University AV Center b/w 16 mm 29 min.

Epileptic Seizure Patterns

Uses original artwork to show historical aspects of epilepsy and various types of epileptic seizures in actual patients. Shows and explains electroencephalography tracings in a normal man and uses a split frame technique to compare normal tracings with those of grand mal, petit mal, automatism, myoclonic, psychomotor, and mixed adverxive-grand mal patients.

Indiana University AV Center color, b/w 16 mm 25 min.

Multiply Handicapped Children

The film aims to demonstrate the educational evaluation of preschool children with single and multiple handicaps. Through the use of graded tests and their flexible presentation it enables children with various handicaps in expression to respond, if necessary without the use of speech or manipulation. The following three cases are shown: a blind child, a child with cerebral palsy, and a hyperactive child.

United Cerebral Palsy Association color 16 mm 30 min.

Orthopedically Impaired

Audiovisuals

FILMS

Billy

Documentary about care and treatment of cerebral palsied child.

United Cerebral Palsy Association color 16 mm 15 min.

Bobath Approach to Cerebral Palsy Habilitation

Illustrates normal sequential growth and development of reflex actions and methods used to initiate these in cerebral palsied children.

Newington Hospital for Crippled Children color 16mm 30 min.

Physiological Aspects of Speech--Speakers with Cerebral Palsy

This film shows the characteristics and types of cerebral palsy and the speech problems resulting from neuro-muscular deficiencies. Comparisons between normal speech patterns and speech patterns of children with various forms and stages of cerebral palsy are shown. Technical functionings in the speech processes explained.

University of Iowa color 16 mm 25 min.

The Cerebral Palsied Child

Discusses the special problems faced by the child with cerebral palsy and explains how physical disability, psychological problems, mental subnormality, and the great number of clinical types adds to the complexity of this affliction. Features Dr. William Cruickshank of Syracuse University.

Indiana University AV Center b/w 16 mm 29 min.

Books, Booklets

A Handbook of Medical, Educational, and Psychological Information for Teachers of Physically Handicapped Children

Harold D. Love, Joe E. Walthall

Presents medical, educational and psychological information especially designed for teachers, teacher-trainers, and the parents of physically handicapped children.

Charles C. Thomas 219 pp 1977

Program Guidelines for Children with Feeding Problems

Suzanne Evans Morris

Practical guide to behavioral management of problems associated with the feeding of disabled children; explicit photographs, simple directions; treat both physiological and psychological deficits.

Childcraft 48 pp 1977

Dancing Games for Chidren of All Ages

Ester L. Nelson

Gives clear and detailed instructions for teaching dances for special occasions and special children (mentally and physically handicapped).

Sterling 72 pp 1976

Physical Activities for the Handicapped

Maryhelen Vannier

Offers a wide range of physical activities; stresses their importance in rehabilitation and education; gives excellent synopsis of each handicapping condition and the physical activities most appropriate. Contains methods and skills for teaching the handicapped through physical activities. Presents camping and outdoor activities.

Prentice Hall — 338 pp — 1977

Teaching Individuals with Physical and Multiple Disabilities
June L. Bigge
Designed for teachers, consultants, supervisors, and others who teach and develop curriculum for individuals with physical and multiple disabilities.

Charles E. Merrill — 279 pp — 1976

Audiovisuals—General

Madison Plan
The film illustrates the implement action of the Madison School Plan in the Santa Monica School District. The project involves handicapped children who would traditionally be labeled EMR, ER, LD, visually impaired and auditorily impaired. This plan provides the education of these kids in a setting allowing free flow of children between the regular classes and the specialized facility (Learning Center).

AIMS Instructional Media Services, Inc. — color — 16 mm — 18 min.

One Step at a Time
Shows how positive reinforcement works—in form of praise, warm physical contact, tokens, charts and graphs, and other rewards—and how it encourages handicapped or retarded children, children with learning problems, or disturbed adults to respond with appropriate behavior.

McGraw Hill — color — 1973 — 30 min.

Mentally Retarded

Books

An Introduction to Mental Retardation: A Programmed Test
Walter E. Ehlens, Curtis H. Krishef, John C. Prothero
Written as a basic introductory text for persons just entering the fields of special education, social workers in agencies that serve the retarded, teachers, and others involved in staff training; may be

used as a "self-instructional" text or in a conventional class.

Charles E. Merrill Publishing Company 384 pp 1977

Helping the Mentally Retarded to Acquire Play Skills: A Behavioral Approach
Paul Wehman
Describes how behavioral training methods may be applied to the play problems of the mentally retarded, provides specific instructional directions, and program guidelines; addresses the leisure-time needs of all ages, and functioning levels of the mentally retarded.

Charles C. Thomas, Publisher 1977

Audiovisuals

VIDEOTAPES

The Mentally Retarded Child
Discusses various types of retardation along with a case study. Also the education methods available to the retarded child along with counseling and guidance is covered.

Videorecord Corp. of America b/w 1972 44 min.

FILMS

Another Kind of School
Demonstrates modern methods of teaching and training mentally handicapped children between ages of five and sixteen.

SWS Educational Films color 16 mm 25 min.

Educable Mentally Handicapped
Discusses the special problems of educable mentally handicapped children. Explains who they are, the problems they face in the community and the school, and what can be done to help them. Uses still photos and filmed sequences of a special class for these children to show the place of the school in meeting the needs of the mentally handicapped.

Indiana University AV Center b/w 16 mm 29 min.

First Steps
Emphasizes the importance of early stimulation and training for educably retarded children, and explores the rationale for integrating them into regular school systems rather than separate

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institutions. Some of the particular needs and overlooked competencies of handicapped children are clearly shown, and the benefits of integrating such children into normal classroom situations becomes obvious.

CRM/McGraw Hill Films 24 min.

Methods of Teaching Art to the Mentally Retarded

Shows teaching techniques in art for the retarded child.

Indiana University AV Center color 16 mm 34 min.

Multilevel Teaching for Normal and Handicapped Children

Demonstrates some techniques used by teachers to provide individual instruction to small groups of children who vary greatly in their individual skill levels; filmed in an experimental classroom in the Kansas Center for Mental Retardation and Human Development.

University of Kansas Film Rental Services 29 min.

Report on Down's Syndrome (Mongolism)

A comprehensive statement of Down's Syndrome, previously called Mongolism, from its first description by the British physician Langdon Down in 1866. Outlines general characteristics and treatment methods, including latest finding in the area of genetics. The advantages and rewards of warm family life and application of the routine-relaxation-repetition formula are illsutrated.

International Film Bureau color 16 mm 21 min.

The Shape of a Leaf

Demonstrates the significance of art education in the training of retarded children and explores the possibilities of teaching them skills, enhancing their perception, and improving their coordination. Instead of concentrating on particular ways to teach the retarded students, ages seven through 19, working on their materials and each student explaining his own work.

Campbell Films color 16 mm 26 min.

Who Are the Winners?

This film is based on the Milwaukee Project, a study of a preventive approach to cultural familiar retardation. The project, a research program designed by Dr. Rick Herber, and staff, has implication for those concerned with the mentally retarded and with the relationship between poverty and mental retardation. Although the long range effects of this program are still unknown, the film and the findings upon which it is based suggest that a large percentage of cultural familial retardation can be prevented through an enriched early learning program.

University of Wisconsin color 16 mm 20 min.
Bureau of AV Instruction

Why Billy Couldn't Learn

This film shows neurologically handicapped children in authentic classroom and playground situations. Shows why neurologically handicapped children need special education help, and how they receive it in the educationally handicapped program. It is one of the best films in this area and the teaching methods and techniques are of special interest. The film is accompanied by a seventeen page study guide.

CANHC Movie Distribution color 16 mm 40 min.

Aids for Teaching the Mentally Retarded Series

Phase A: Motor Training

Unique devices and exercises stimulate the passive child to initiate activities and help him to understand cause and effect relationships.
Sale: $132.00 rental: $5.00 color 16 mm 11 min.

Phase B: Initial Perceptual Training

Exercises involving various sensory areas are provided to help improve perceptual skills.
Sale: $90.00 rental: $5.00 color 16 mm 7-1/2 min.

Phase C: Advanced Perceptual Training

Building upon previous exercises, new experiences are provided that help the student to make decisions and draw conclusions.
Sale: $108.00 rental: $5.00 color 16 mm 9 min.

Phase D: Integrated Motor-Perceptual Training

This stage includes activities that integrate movement and perception.
Sale: $77.00 rental: $5.00 color 16 mm 6 min.

Phase E. Sheltered Workshop

Actual work experiences, adjusted to the levels of their abilities are offered to students in the training phase of the sheltered workshop program.
Sale: $65.00 rental: $5.00 color 16 mm 5 min.

Thorne Films, Inc. Sales
Bureau of AV Instruction Rental

Teaching the Mentally Retarded Through Music

In each of the four presentations, Dr. Richard Weber explains and demonstrates his approach to teaching the mentally retarded through music. He shows how music becomes a motivator for developing writing and reading skills as well as a stimulus for better self-control.

Governor's Interagency Council on Mental Retardation b/w 16 mm 30 min.
Sale and Rental: Consult distributor

Severely Handicapped

Films

Cast No Shadow

Vividly depicts a wide variety of recreation activities for severely mentally retarded, physically handicapped and emotionally disturbed children, teens and adults at the nationally recognized Recreation Center for the Handicapped, Inc. in San Francisco.

Professional Arts, Inc. color 16 mm 29 min.

Books

Teaching the Moderately and Severely Handicapped, Vol. I

Michael Bender, Peter J. Valletutti

Presents a curriculum of functional academics in reading, writing, arithmetic, consumer skills; includes objectives, activities, and strategies, for therapeutic programs.

University Park 361 pp 1976

Teaching the Moderately and Severely Handicapped, Vol. II

Vol. II Communication, Socialization, Safety, Leisure Time Skills

Michael Bender, Peter J. Valletutti, Rosemary Bender

Behaviorally oriented, specific-directed activity handbook for activities that reinforce socially acceptable skills and prepare for leisure activities.

University Park 420 pp 1976

Visually Impaired

Books, Booklets

The Blind Child in the Regular Kindergarten

Josephine Stratton

Reviews the literature on the learning behavior of the blind child. Gives a specific teaching guide, indicating by code which curricula need no adapting, which require some changes, and which are entirely inappropriate.

Charles C. Thomas	88 pp	1977

Audiovisuals

VIDEOCASSETTES

Special Aids for the Visually Handicapped

The probability of a regular classroom teacher having a visually handicapped student is increasing significantly. Designed to illustrate some of the special aids and resources available for both student and teacher, when in a regular classroom. The visually handicapped are being encouraged to take every advantage of regular education programs.

State University of New York at Brockport	30 min.

RECORDS

Days of Shadow

Story of special children who live in a world of shadows and partial sight. Provides information concerning the social, education, and emotional needs of visually handicapped.

Media	30 min.	1972

Before We Are Six

An updated film to prepare professionals and volunteers to screen the vision of preschool and school children.

National Society for Prevention of Blindness, Inc.	color	16 mm	22 min.

Blinded Chidren in Sighted Physical Education Classes

This films shows several situations in which blind children participate in regular physical education classes with sighted children in elementary and junior high schools in DeKalb, Illinois. Physical coordination, behavior typical of blind children, and techniques used in assisting them in physical activities with normal children of the same age are demonstrated. The film also focuses on attitudes of blind children and their acceptance by sighted children in the regular program.

Northern Illinois University	b/w	17 mm	20 min.

FILMS

Bus Travel

Dependence upon others for getting from one place to another is one of the greatest handicaps for the blind. Learning orientation and mobility skills greatly minimize that limitation. This film demonstrates a number of the specific orientation and mobility skills which blind persons need if they are to use public transportation. Blind children are shown learning a sequence of bus travel skills, starting with concept building and concluding with a "solo run."

Alameda County School Department color 16 mm 13 min.

Eyes and Their Care

Examines the eye in terms of structure, functions, disorders, and hygiene. Reveals, with animated drawings, the various parts of the eye and explains the physiology of sight. Illustrates such eye defects as nearsightedness, farsightedness, and astigmatism, and describes their correction with proper glasses. Calls attention to eye infections, the removal of foreign bodies, and damage by radiation.

Encyclopedia Britannica Educational b/w 16 mm 11 min.
Corporation

Not Without Sight

Defines the major types of severe visual impairments, examines their causes and illustrates how those with visual impairments function. It was produced to answer the need made by those in the field of blindness for a film which might help to dispel some of the stereotypic thinking sighted people have about blindness and other forms of severe visual impairments.

American Foundation for the Blind 16 mm color 1973
19-1/2 min.

Visual Perceptions and Failures to Learn

Depicts difficulties in learning for children who have disabilities in visual perception. Demonstrates the Marianne Frostig test and outlines a training program.

AIMS Instructional Media
Services, Inc. b/w 16 mm 20 min.

The Visually Handicapped Child, the Blind

Discusses the special problems encountered by the child who is blind, and explains the care and understanding needed in order to enable the blind child to develop and to participate in the relationships of life. Illustrates the limitations imposed by blindness, and describes materials and techniques used in the education of the blind.

National Educational Television b/w 16 mm 29 min.
Indiana University AV Center

APPENDIX B

Distributors for Books and Audiovisuals Listed in the Module

APPENDIX B

Distributors for Books and Audiovisuals on Special Education*

ACI Productions, Inc.
35 West 45th Street
New York, NY 10036

AIMS Instructional Media Service, Inc.
P.O. Box 1010
Hollywood, CA 90028

Academic Therapy Publications
P.O. Box 899
1539 Fourth Street
San Rafael, CA 94901

Acme Film Labs, Inc.
1161 North Highland Avenue
Hollywood, CA 90038

Alameda County School Department
Orientation-Mobility Project
224 West Winton Avenue
Hayward, CA 94544

Alexander Graham Bell
Association for the Deaf
3417 Volta Place
Washington, DC 20007

Allyn and Bacon, Inc.
470 Atlantic Avenue
Boston, MA 02210

American Foundation for the
Blind, Inc.
15 West 16th Street
New York, NY 10011

BFA Educational Media
P.O. Box 5467
Church Street Station
New York, NY 10249

Bank Street Films
267 West 25th Street
New York, NY 10001

Behavior Modification
Technology, Inc.
Box 597
Libertyville, IL 60048

Bemidji State University
Child Development Training
Program
Bemidji, MN 56601

CRM Educational Films
220 Twelfth Street
Del Mar, CA 92014

Campbell Films
Academy Avenue
Saxtons River, VT 05154

Campus Film Distributors, Inc.
20 East 46th Street
New York, NY 10017

Chapel Hill-Carrboro City
School System
Lincoln Center
Chapel Hill, NC 27514

Child Welfare League of
America, Inc.
67 Irving Place
New York, NY 10003

Childcraft Education
20 Kilmer Road
Edison, NJ 08817

Columbia University Press
136 South Broadway
Irvington, NY 10533

Contemporary Films/
McGraw Hill
1221 Ave. of the Americas
New York, NY 10020

Council for Exceptional Children
1920 Association Drive
Reston, VA 20291

Crowell, Thomas Y., Inc.
10 East 53rd Street
New York, NY 10022

Davidson, Robert
Apt. 1-E
257 W. 10th Street
New York, NY 10014

Dell Publishing Company
1 Dag Hammarskjold Plaza
New York, NY 10017

Dubnoff School for Education
Therapy
10526 Victory Place
North Hollywood, CA 90038

Easter Seal Society for Alaska
Crippled Children and Adults
726 E Street
Anchorage, AK 99501

Education Service Center
Region XIII
7703 N. Lamar
Austin, TX 78752

Educational Activities, Inc.
1937 Grand Avenue
Baldwin, NY 11510

Encyclopedia Britannica
Educational Corporation
425 N. Michigan Avenue
Chicago, IL 60611

Far West Laboratory for Educational
Research and Development
1855 Folsom Street
San Francisco, CA 94103

Gryphon House
Box 76108
Birmingham, AL 35223

Harper and Row Publishers
10 E. 53rd Street
New York, NY 10022

Harris County Center for the
Retarded, Inc.
P.O. Box 13403
Houston, TX 77019

High Scope Educational Research
Foundation
Instructional Media Services
600 N. River Street
Ypsilanti, MI 48197

Holt, Rinehart & Winston, Inc.
383 Madison Avenue
New York, NY 10017

Indiana University
Audio-Visual Center
Bloomington, IN 47401

International Film Bureau
332 South Michigan Avenue
Chicago, IL 60604

Irvington Publishers, Inc.
551 Fifth Avenue
New York, NY 10017

Knowledge Builders
Visual Education Building
Lowell Ave. & Cherry Lane
Floral Park, NY 11011

Lexington School for the Deaf
30th Avenue & 75th Street
Jackson Heights, NY 11370

McGraw Hill Book Company
P.O. Box 37439
San Francisco, CA 94137

McGraw Hill Book Company
P.O. Box 402
Highstown, NJ 08520

McCraw Hill Films
1221 Avenue of the Americas
New York, NY 10020

Media Five Film Distribution
1001 N. Cole Avenue
Hollywood, CA 90038

Charles E. Merrill
Publishing Company
Columbus, OH 43216

Metropolitan Life Insurance Co.
Health and Welfare Division
1 Madison Avenue
New York, NY 10010

Michigan State University
Competency-Based Teach Education
East Lansing MI 48823

Modern Talking Picture Service
Film Libraries
c/o Buchan Pictures
122 West Chippewa Street
Buffalo, NY 14202

Modern Talking Picture Film
Library, Suite 4
200 L Street N.W.
Washington, DC 20036

Mosby, C.V., Company
11830 Westline Industrial Drive
St. Louis, MO 63141

National Association for the
Education of Young Children
1834 Connecticut Avenue N.W.
Washington, DC 20009

National Association for Mental
Health
1800 N. Kent Street
Rosslyn, VA 22209

National Audiovisual Center
National Archives and Records
Service
Washington, DC 20409

New York University Film
Library
26 Washington Place
New York, NY 10003

Newington Hospital for Crippled
Children
Newington, CT 06111

Northern Illinois University
Audio Visual Center
De Kalb, IL 60115

Ohio State University Film
Library, Department of
Photography and Cinema
156 West 19th Avenue
Columbus, OH 43210

Parent Magazine Films, Inc.
Box 1000
Elmsford, NY 10523

Pennsylvania State University
Continuing Education Stores
Room 7
J. Orvin Feller Building
University Park, PA 16802

Prentice-Hall Film Library
College Division
Prentice Hall, Inc.
Englewood Cliffs, NJ 91608

Research Press
Box 31779
Champaign, IL 61820

SWS Educational Films
3031 Kallin Avenue
Long Beach, CA 90808

Special Learning Corporation
42 Boston Post Road
Guildford, CT 06437

Special Purpose Films
26740 Latigo Shore Dr.
Malibu, CA 90265

State University of New York
at Buffalo
4242 Ridge Lea Road
Amherst, NY 14226

Sterling Publishing Company
412 Park Avenue South
Oak Tress Co., Ltd.
London, NY 10016

Teaching Resources Corp.
100 Boylston Street
Boston, MA 02116

Charles C. Thomas
301-327 E Lawrence Ave.
Springfield, IL 62717

University of Iowa
Audio-Visual Center
Division of Extension and
University Service
Iowa City, IA 52240

University of Kansas
Film Rental Services
746 Massachusetts St.
Lawrence, KS 66044

University of Michigan
A-V Education Center
416 Fourth Street
Ann Arbor, MI 48103

University Park Press
Chamber of Commerce Bldg.
Baltimore, MD 21202

University of State of New York
Education Department
Division of Handicapped Children
Albany, NY 12224

Time-Life Films, Inc.
100 Eisenhauer Drive
Paramus, NJ 07652

Total Communication Laboratory
Western Maryland College
Westminster, MD 21157

USC Special Order Department
and Bookstore
University of Southern California
University Park
Los Angeles, CA 90007

United Cerebral Palsy Assn., Inc.
Professional Svcs. Program Dept.
66 East 34th Street
New York, NY 10016

Univ. of California Extension
Public Film Rental Library
2223 Fulton Street
Berkeley, CA 94720

University of California at
Los Angeles
Film Library
Los Angeles, CA 90024

University of California Press
1414 South 10th Street
Richmond, CA 94804

University of Texas
Visual Instruction Bureau
Drawer W University Station
Austin, TX 78712

University of Washington
Experimental Education Unit
Seattle, WA 98105

University of Wisconsin
Bureau of AV Instruction
1327 University Avenue
Madison, WI 53701

Wayne State University
A-V Productions Center
680 Putnam
Detroit, MI 48202

Wilkerson, Bill
Hearing and Speech Center
Division of Language Development Programs
114 Nineteenth Avenue, South
Nashville, TN 37212

Wright, Bradley Films
309 N. Duane Avenue
San Gabriel, CA 91775

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*Adapted for the PEG Program, SKILLBANK, Social Sciences Division, Burlington County College, Pemberton, New Jersey 08068.